General NPDES Permit AK G70-1000: Log Transfer Facilities in Alaska

EPA Response to Comments

EPA proposed and solicited comments on the draft general permit for Log Transfer Facilities in Alaska in the Federal Register at 19 FR 5111-5112 (September 31, 1996), Anchorage Daily News, Ketchikan Daily News, The Seward Phoenix Log, The Valdez Vanguard, and The Cordova Times. The public comment period was extended by 21 days, notice of which was published in the Federal Register at 215 FR 57425 (November 6, 1996) as well as the Valdez Vanguard, Daily Sitka Sentinel, The Cordova Times, and The Seward Phoenix Log on November 7, 1996. EPA also convened a two-day meeting with all commenters on March 11 and 12, 1997, in order to clarify those comments received and allow commenters to hear each other's concerns.

The EPA received written comments from facility representatives, tribal representatives, concerned citizens, environmental groups, the U.S. Forest Service (USFS), U.S. Fish and Wildlife Service (USFWS), US Corp of Engineers (COE) and the State of Alaska. More specifically comments were received during the public comment period from Claire Johnson; Peter Hocson, Huna Totem Corporation; Paul Barter, Kinnetic Laboratories Inc.; Craig Sempert, Craig's Dive Center; Buck Lindekugel, Southeast Alaska Conservation Council (SEACC); Ellen Maling, Alaska Wilderness Recreation & Tourism Assoc. (AWRTA); Richard Harris and Kenneth Vaughan; Joseph Sebastian; David Voluck, Sitka Tribe of Alaska; Erik Lei-Neilsen; Geoffrey McNaughton, Koncor Forest Products Co.; Silliam Johnson, Cape Fox Corp; James Wolfe, United States Department of Agriculture (USDA); Gene Long, Chugachmiut; Clare Doig, Forest & Land Management Inc. (FLM); Chris Kent, Juneau National Audubon Society (NAS); James Senna, Shee Atika Inc; Casimero Aceveda, Organized Village of Kake; Bert Krages, Attorney at Law; Buck Lindekugel, SEACC; Irene Alexakos, Alaska Clean Water Alliance (ACWA); Nevin Holmberg, USFWS; Eric Hummel, Tongass Conservation Society (TCS); Clarence Clark, Shaanseet; Alaska Society of American Foresters (ASAF); Ketchikan Pulp Corporation (KPC) and Robert Loescher, Sealaska. The following is a summary of the substantive comments related to the draft permit and the EPA's responses:

A. General Comments

A1. **Appropriateness of General Permit**. EPA should save the taxpayer's money and abandon the controversial general permit (GP) effort, since it will suffer successful legal attack (Lie-Nielson). EPA should issue individual permits for LTFs (Johnson).

Response: EPA has the authority to issue a general NPDES permit for a class or category of discharges meeting the criteria listed in 40 CFR §122.28 (see page 2 of the Fact Sheet). In EPA's opinion, LTF discharges meet these criteria. The GP applies to discharges within a geographic area (southeast and southcentral Alaska); the discharges involve the same or substantially similar types of operations (transferring logs into marine waters) and the same

types of wastes (bark and wood debris). Since 1985, 65 individual NPDES permits have been issued for LTFs in Alaska. Differences among these individual permits are minor, and reflect the evolution of industry-wide standards, rather than specific differences among dischargers.

Issuance of this general permit (GP) is consistent with the requirements of the Clean Water Act (CWA). The legal and scientific basis is documented in the Fact Sheet, this Response to Comments, and the Administrative Record.

Issuance of this GP allows EPA to develop a comprehensive, efficient, and fair regulatory program for LTF discharges. Development of this GP includes substantial public review and analysis, and enables EPA to establish fair and effective industry standards for LTF siting, operation, monitoring, and reporting. This GP streamlines administrative processes for both EPA and permittees without sacrificing environmental protection. In fact, the GP increases environmental protection by extending the universe of permittees to include low volume discharges, without incurring disproportionate costs to industry or EPA. For these reasons, EPA believes that qualifying discharges are more appropriately controlled under this GP than under an individual permit.

A2. **Compliance with Water Quality Standards**. Authorization of new LTFs under GP fails to meet state water quality standards (SEACC, TCS, ASAF, COE).

Response: This GP authorizes qualifying discharges of bark and wood debris at LTFs in accordance with the provisions of the permit. LTFs authorized under the GP are required to minimize the introduction of bark and wood debris into marine waters through implementation of effluent limitations and best management practices. Annual underwater bark monitoring is required for LTFs where bark accumulation is likely to occur. Permittees are also required to develop and implement a pollution prevention plan.

ADEC issued its Certificate of Reasonable Assurance that discharges authorized under the general permit will comply with the state's water quality standards. Part IV.A.3 of the GP incorporates the Zone of Deposit (ZOD) authorized by ADEC. In the ZOD, ADEC authorizes a waiver from the state water quality standard for residues for accumulation of bark and wood debris on the ocean bottom within the project area of a LTF, with the primary area of continuous coverage required, to the extent practicable, to be collocated with the primary area of continuous coverage existing prior to discharge under the general permit, unless a different area is authorized by ADEC. This GP does not authorize new discharges into waters included on the list of impaired or water quality limited for residues or where existing continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point.

A3. **Alternatives to Discharge**. Authorization of new LTFs under a GP fails to meet goals/objectives of the CWA (SEACC, TCS, ASAF). The proposed GP is not consistent with the objective of the CWA (to restore and maintain physical, chemical, and biological

integrity of U.S. waters, and to eliminate discharges of pollutants. The CWA states that "wherever possible, BAT standards must require the elimination of discharges altogether." For LTFs, elimination of discharges is technologically achievable. Debarking and barging are simple in concept and execution. Beneficial uses of bark include paper stock, hog fuel, and wood chips for landscaping, gardens, trails, and playgrounds (ACWA).

EPA should address alternative uses of bark before issuing this GP (debarking for use as hog fuel, mulch, landscaping; land-to-barge transfer). It is wasteful to discharge bark as a pollutant when it can be a useful and valuable product (USFWS).

The proposed GP includes only select ATTF Guidelines. EPA should incorporate ATTF Guideline C10: "Where feasible, preference must be given to on-shore storage and barging of logs" (ACWA, SEACC, TCS, ASAF). Owners/operators should be required to show that barging or debarking logs is not feasible. Otherwise, in-water transfer/storage should be prohibited (ACWA).

GP should require both new and existing LTF operators/owners to demonstrate that land to barge or helicopter methods of log transfer are not feasible (SEACC, TCS, ASAF).

Construction of a barge loading facility may destroy intertidal habitat; however, the fill can be removed to restore the site. Bark and wood debris decay slowly and destroy marine habitat for decades. These changes may affect entire estuary. Removal of bark and wood debris from marine environment is costly and difficult (USFWS).

EPA should pursue zero discharge for LTFs. EPA needs to consider the economic value of existing aquatic resources, including commercial fishing and shellfishing, recreational fishing and hunting, water-based recreation, and tourism (ACWA).

One solution is to begin using barges for log transfer (AWRTA). Siting requirements would be more flexible for direct land-to-barge LTFs. Land-to-barge log transfer is feasible and cost effective. Advantages of direct land-to-barge transfer include a higher quality of log (lower moisture content and greater heat content), and decreasing losses due to saturation and broken log rafts. The elimination of in-water log storage would result in no bark accumulation or leaching from bark piles (TCS).

Response: Wherever possible, alternatives to discharging bark and wood debris should be encouraged (e.g., barging of logs, debarking). Therefore, EPA has added a provision to the Notice of Intent requirements of the permit (Section V.D.4.h) to include an assessment of the feasibility of onshore storage and barging. EPA will review this assessment before providing written authorization to discharge under this permit.

However, EPA recognizes that for some timber harvest operations in Alaska, on-site debarking and/or elimination of in-water log storage is not feasible. For instance, barging or debarking of logs requires additional upland areas for log storage and/or processing. Space for upland development may not be available at all sites. In addition, there may be substantial distance separating the timber harvest area from its marketing destination. The lack of infrastructure in remote harvest areas increases the expense of transporting products (logs, bark and wood debris for recycling) and specialized equipment (barges, debarkers). The investment needed to develop this infrastructure may not always be supported by the scale of operations. This may apply to more LTFs in the near future; more opportunities may become available for small, independent contractors since the recent cancellation of the U.S. Forest Service's long term contracts with Ketchikan Pulp Company (KPC) and Alaska Pulp Company. Therefore, EPA does not believe that a zero-discharge standard would be economically achievable for many LTF operations in Alaska.

A4. **Use of Existing LTFs**. Given the impacts of LTFs and lack of information on effectiveness of ATTF guidelines and Best Management Practices, EPA should require that existing LTFs (rather than new ones) be used even where more expensive (SEACC, TCS, ASAF).

EPA should adopt a policy that using existing LTFs is more environmentally sound than using pristine areas, unless clearly demonstrated otherwise. Although the Fact Sheet states that newer permitted LTFs have smaller bark deposits than the older ones, this is probably related to the larger volume of timber transferred over the older sites. The Fact Sheet says that no quantitative models exist to predict bark accumulation, and that patchy accumulation may increase the numbers and diversity of benthic organisms (USFS).

GP should not authorize new LTFs. Wherever possible, old sites should be re-used (Johnson).

Response: It is not clear whether the requested action in these comments can be accomplished through issuance of a general NPDES permit. Authorization of new LTFs will be highly scrutinized through application of the GP criteria. The continued use of existing LTFs will also be evaluated on a case-by-case basis through the Notice of Intent. EPA anticipates that many of the existing LTFs will meet the criteria of this GP; however, some may not, particularly where bark accumulations exceed 1 acre and a 10 centimeter thickness. In those cases, establishment of a new LTF may be preferable to continued use of an existing LTF.

Section 303(d) of the CWA requires the state to list waterbodies where state water quality standards are not achieved. This designation triggers a requirement to determine Total Maximum Daily Loads (TMDLs) for each impaired waterbody. If a LTF is situated in a waterbody listed as impaired, the state and EPA may determine that continued LTF discharges should be further reduced or eliminated during the TMDL process.

A5. **Public Participation**. Authorization of new LTFs under the GP frustrates public participation process (SEACC, TCS, ASAF). "Blanket permits" will allow USFS to avoid the public process and obscure future unpopular actions (Lie-Nielson). Careful and thorough public process needed to identify site-specific public concerns (e.g., LTF proposed at Fantasy Island, No-name Bay, would have conflicted with use of this ice-free winter harbor) (ASAF). A "blanket permit" circumvents the public/private consideration of specific sites, and is contrary to EPA's mission to enforce environmental laws (Lie-Nielson).

Response: The draft GP was developed through an intensive public process, including two years of informal consultation with representatives from resource agencies, industry, and environmental advocacy groups (Cantor 1997b). EPA solicited public comment on the draft GP during a 51-day public notice. Public notices were published in seven local newspapers and in the federal register, and were mailed to over 200 potentially interested parties. As a result, EPA received 26 comment letters on the proposed action. All substantive comments are summarized and addressed herein, in accordance with the requirements of 40 CFR §124.17.

The determination that a proposed discharge meets the provisions of the GP will only be made after evaluation of site-specific information contained in the Notice of Intent (NOI). The NOI must include a detailed description of the receiving waters, and may include an underwater survey of marine resources which may be affected by the proposed discharge. EPA will forward each NOI to appropriate agency and tribal contacts at least 30 days prior to making a decision whether to authorize a proposed discharge (see Comment A6). If conditions of the GP are not met, then an individual permit would be required.

In addition, any interested person may petition EPA to require a discharger authorized by a general permit to apply for and obtain an individual NPDES permit under 40 CFR §122.28(b)(3). Cases where an individual NPDES permit may be required include the following: the discharger is not in compliance with the conditions of the general NPDES permit; a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source; effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit; a Water Quality Management plan containing requirements applicable to such point sources is approved; circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary; or the discharger is a significant contributor of pollutants. Individual permit issuance involves public notice to provide an opportunity to submit comments and request a public hearing.

Many of the concerns raised in this comment may be addressed through other regulations, but are outside the scope of this NPDES permit. For instance, major U.S. Forest Service timber sales will trigger National Environmental Policy Act (NEPA) requirements for environmental review and public disclosure. The majority of LTFs also require a Section 404 permit and state

tideland lease. These actions do involve public review and comment on site-specific issues relating to public interest, conflicts in use, alternatives, and impacts on fish and wildlife.

A6. **Agency and Tribal Consultation**. GP issuance will result in loss of ability to comment on and protect against impacts of wood debris on marine environment. Corps does not consider bark deposits in its permit evaluation (USFWS).

The proposed GP would eliminate public/tribal participation in the authorization of LTF discharges. Failure to include tribal governments contradicts the presidential memo "Government to Government Relations with Native American Tribal Governments." Tribes would be most affected by proposed GP. Tribes have intimate knowledge of marine resources (biological and cultural); some information may only be available through local native communities. Many tribes have their own natural resource departments and biologists. EPA needs to consult with tribal governments regarding cumulative impacts and cultural resources. For these reasons, the consultation agreements must include affected tribal governments (Sitka Tribe).

Response: Administration of this GP will include consultation with U.S. Fish and Wildlife Service and other state, federal, and tribal agencies having jurisdiction over resources affected by LTF discharges in Alaska. EPA will forward NOIs to the appropriate agency or tribal contact at least 30 days prior to making a decision whether to authorize the proposed discharge. The purpose of the consultation is to assist EPA in its determination that a proposed new discharge meets the provisions of the GP. Potential impacts of wood debris and bark deposits on the marine environment can be addressed through this mechanism (see Page 29 of the Fact Sheet).

A7. **Need for New LTFs**. The need for new LTFs is questionable, especially in light of mill closures and decreases in future demand (Lie-Nielson).

Response: EPA's decision to authorize a discharge under Section 402 is based on whether that discharge complies with the provisions of the CWA. The reasons for issuing a GP are independent of the number of new LTFs which may be authorized under the GP (See Comment A1 and page 2 of the Fact Sheet).

A8. **Effects on Marine Environment**. LTFs are associated with bark accumulations which smother the benthic community (TCS). Bark accumulations result in loss of habitat and long term effects on benthic communities (NAS). EPA should consider impacts on sensitive areas such as herring spawning grounds and crab rookeries (Claire Johnson).

Response: Deposits of bark and wood debris in the marine environment can result in long-term changes in the physical, chemical, and biological structure of the benthic environment. The Fact Sheet and the Ocean Discharge Criteria Evaluation for the draft GP summarize the known

characteristics of bark deposits and potential impacts on the marine environment.

The GP contains many provisions aimed at minimizing impacts to the marine environment. For instance, Part III excludes activities where bark deposits may affect sensitive and/or productive marine habitats. Part IV.A provides enforceable effluent limitations to ensure water quality standards are met. Parts IV.B and Part VII require implementation of best management practices to reduce generation, discharge, and accumulation of waste in the marine environment. Finally, compliance with permit provisions will be evaluated through field inspections and self-monitoring (Parts VI, X, and XI).

A9. **Requirements of the National Environmental Policy Act (NEPA)**. EPA should conduct appropriate NEPA analysis for issuance of the proposed GP. The distinction between "new discharger" and "new source" is an artificial construct to avoid NEPA process (SEACC, TCS, ASAF, ACWA). The classification as a new discharge excludes public participation (ACWA).

The proposed GP is a major federal action affecting the human environment. An EIS should be developed (USFWS).

Response: Under Section 511(c)(1) of the CWA (33 USC §1371(c)(1)), an Environmental Impact Statement is not required for issuance of this GP (see Page 29 of the Fact Sheet).

A10. **NEPA Requirements for Related Actions**. NEPA requirements for timber sales do not address deposition of wood debris (USFWS). USFS fails to adequately inform the public about proposed new LTFs in the Tongass National Forest (e.g., locations, alternatives, environmental impacts, or impacts from existing LTFs)(ACWA, SEACC, TCS, ASAF).

NEPA requirements for U.S. Army Corps of Engineers permit actions do not address deposition of wood debris (USFWS).

Response: Compliance with the NEPA requirements by the U.S. Forest Service or U.S. Army Corps of Engineers is beyond the scope of this permit action.

A11. **Effectiveness of ATTF Guidelines**. EPA fails to adequately inform the public about the effectiveness of the ATTF guidelines and BMPs to mitigate environmental impacts (ACWA, SEACC, TCS, ASAF). No studies are available regarding the effect of ATTF guidelines on pollutant discharges and other environmental impacts, and compliance with WQS (SEACC, TCS, ASAF).

Response: In 1985, the Alaska Timber Task Force (ATTF) developed guidelines to "delineate the physical requirements necessary to construct a log transfer and associated facilities and -- in context with requirements of applicable law and regulations -- methods to avoid or control potential impacts from these facilities on water quality, aquatic and other resources." Since

1985, the ATTF Guidelines have been applied to new LTFs through the requirements of NPDES permits and other state and federal programs. In the context of the NPDES program, "effectiveness" of the ATTF guidelines can be measured in terms of technology-based and water quality-based standards. A comparison between the bark deposits measured at pre-1985 sites with those of post-1985 sites would provide one measure of the effectiveness of the ATTF guidelines. In fact, bark deposits measured at 27 permitted, post-1985 LTFs were markedly lower than those measured in 1976 at 13 abandoned LTFs (see page 3 of the Fact Sheet). It is likely that the observed reduction in bark accumulation reflects differences in operation, siting, and management of LTFs resulting from implementation of the ATTF guidelines. ADEC and the Board of Forestry are organizing a Science and Technical Log Transfer Facility Work Group(s). It has been proposed that the group(s) address remediation, dive survey guidance, cooperative dive investigations, the effectiveness of ATTF guidelines, and offshore log storage sites. The group(s) are expected to include the timber industry, fishing industry, subsistence citizens, appropriate state and federal agencies, and other public use interest members.

A12. **Cumulative Impacts**. EPA does not have adequate information and thus fails to account for cumulative impacts to the marine environment (SEACC, TCS, ASAF, ACWA).

ACMP requires a meaningful analysis of cumulative effects on subsistence resources. LTF permits and associated timber harvests are coextensive and have grave impacts on subsistence harvests. It is not possible to analyze each activity separately as unrelated actions (Sitka Tribe).

Response: The Administrative Record supporting EPA's permit decision includes a Fact Sheet and Ocean Discharge Criteria Evaluation (ODCE) for the GP. The Fact Sheet briefly sets forth the principal facts and significant factual, legal, methodological, and policy questions considered in preparing the draft permit. The Fact Sheet includes a description of the type of facility and activity which is the subject of the draft GP; the type and quantity of wastes, fluids, or pollutants proposed to be discharged; a summary of the basis for draft permit conditions, including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record; and a description of the procedures for reaching a final decision on the draft permit. The Fact Sheet includes maps and detailed descriptions of the geographic area covered by the draft GP and the areas excluded from coverage, and explains the reasons why the draft GP limitations are applicable. Finally, the Fact Sheet includes the requirements of state certification under Section 401(a)(1) of the CWA. Although the Fact Sheet for this permit meets or exceeds requirements of 40 CFR §124.8 and §124.56, an analysis of cumulative effects on subsistence and other marine resources is not required.

However, the ODCE for the GP does include a detailed discussion of potential impacts on marine resources, including subsistence uses. The purpose of the ODCE is to determine whether the draft GP complies with the EPA Ocean Discharge Criteria for preventing unreasonable degradation of the territorial seas, the contiguous zone, and the oceans. Specifically, the ODCE details the types and quantities of discharges; discusses transport, persistence, and fate of the

wastes; provides an overview of aquatic communities and important species likely to be present in southeast and southcentral Alaska; presents the means by which LTF discharges can impact marine life, and the concentrations at which effects have been documented; discusses the potential for LTF operations to adversely impact threatened and endangered animal species; and addresses important uses and plans for marine environments in southeast and southcentral Alaska, particularly subsistence harvests and coastal zone management plans. Finally, the ODCE evaluates the compliance of expected LTF discharges with the State of Alaska and EPA water quality criteria.

A13. **GIS Map**. A GIS map with all abandoned, currently used, and proposed log transfer and storage facilities in Alaska would be very educational (Claire Johnson).

Response: EPA agrees that a map showing all existing, abandoned, and proposed LTFs in Alaska would be a useful tool for assessing LTF impacts. In 1985, Faris and Vaughan published a comprehensive overview of LTFs in Alaska. The ODCE for this GP also includes a map showing the locations of all LTFs in Alaska for which baseline survey data, operational information, or bark monitoring data were available (as of September 1995). In addition, issuance of General NPDES Permit AK G70-0000 (Section 402 modifications of Section 404 Permits issued for LTFs prior to October 22, 1985) will expand and update the existing database by requiring notification and monitoring for all dischargers authorized under Section 404 permits prior to October 22, 1985.

A14. **Site-specific impacts and alternatives**. EPA fails to adequately inform the public about the location, site-specific impacts, and alternatives to development of new LTFs which would be authorized by this action (ACWA, SEACC, TCS, ASAF).

EPA does not have adequate information to make a reasoned decision regarding site-specific impacts (SEACC, TCS, ASAF).

Response: This GP identifies the conditions deemed necessary for a class or category of dischargers to meet the requirements of the CWA. Parts I (Authorized Facilties) & II (Authorized Discharges) of the permit clearly sets out the conditions under which an applicant would be authorized. These conditions were designed to ensure that the authorized discharge will comply with the provisions of the CWA (see pages 7-13 of the Fact Sheet). The process of developing the GP conditions included extensive public participation (see Comment A5).

Site-specific impacts associated with the discharge of bark and wood debris will be evaluated prior to authorization of any discharger under this permit. In order to assess those impacts, EPA requires all applicants to submit information regarding location of the facility, name of receiving water, bathymetric maps, schematic drawings of the facility, and the results of a preliminary underwater survey of marine resources. This information is necessary for EPA to determine whether the proposed activity meets the provisions of this GP, and does not occur in one of the excluded areas listed in Part III. EPA will consult with other government and tribal

groups prior to authorizing a discharge under this permit. (see Comment A6).

A15. **Impacts on Other Uses**. The draft GP and fact sheet fail to disclose sufficient information on competing resource objectives (ACWA, SEACC, TCS, ASAF).

EPA should consider Calvin and Ellis report on anchorages which are visually impaired due to clearcutting (Claire Johnson). Logging activity has impaired 55% of anchorages in Southeast Alaska (AWRTA, ACWA). Cables, heavy equipment, and logs may impair a boat's ability to anchor safely (AWRTA). Thoughtless LTF planning has ruined many boat anchorages - options for winter boat travel are limited by number of ice-free anchorages (ASAF).

EPA should establish an intensive permitting process to evaluate the impacts of LTF site development on tourism (AWRTA).

Response: The establishment and operation of an LTF at a particular site may impact competing land and water uses. These are addressed in Chapters 7 and 8 of the ODCE. Absent a finding of unreasonable degradation under Section 403, conflicts over land use are outside the purview of the CWA. Programs dealing with land use conflicts include the Coastal Zone Management Act and local zoning ordinances. Pages 29-32 of the Fact Sheet provide a more complete discussion regarding other program requirements.

A16. **Indirect Impacts**. After logs are removed from marine waters, the burning of salt-impregnated logs creates substantial amounts of dioxins and furans (TCS).

Response: This permit applies only to log transfer and storage activities, and does not authorize the discharge of any waste material generated as a result of log processing. Air quality impacts and the upland disposal of solid waste are outside the purview of the CWA and this NPDES permit.

A17. **Enforcement of Individual Permits**. Violators should be denied authorization to discharge (Claire Johnson).

The draft GP implies that existing LTFs which are not in compliance with their individual permits will not be covered under the GP. Twenty percent of LTFs with bark accumulation data are not in compliance with their individual permits. No enforcement action has been taken against these permittees (ACWA).

How has EPA enforced LTF violations (Claire Johnson)? There are no known enforcement actions against any LTFs, despite many field reports from ADEC/ADFG documenting the discharge of sediments, grounding of log rafts, and presence of oil sheens (NAS).

Response: The GP does not address violations of past permits. Issuance of this GP does not affect whether or if violations of past permits will be or can be enforced. The decision to enforce any permit condition is within the agency's discretion, and is based on an analysis of all of the circumstances, including evaluation of data to determine the severity of the violation, the compliance history of the permittee, and relevant facts and legal provisions involved in a particular case. The exclusions in Part III, however, does not allow a new LTF to be authorized under this GP that is in an impaired waterbody for residues due to log transfer or storage activities or which has continuous coverage of bark and wood debris exceeding both 1 acre and a thickness of 10 centimeters.

This GP includes enforceable language which will facilitate, and not preclude, enforcement options for violations of the GP. Moreover, this GP and the Section 402 modifications establish standard requirements for all LTFs in Alaska, and will allow more equitable enforcement of those requirements among LTFs. Finally, issuance of this GP and the Section 402 modifications will reduce duplication, needless paperwork and delay in permit issuance and allow EPA to apply its own resources to manage the LTF program more effectively.

A18. **Interagency Review Team**. EPA should form an interagency review team to conduct periodic site visits to determine if the GP is functioning as intended and if modifications are needed (USFWS).

Response: The establishment of any interagency review team would not impose additional requirements on the permittee, and thus would not result in changes to the draft GP. EPA agrees that an interagency coordination and review may play an important role during the implementation of this permit.

B. Comments on Cover Page

B1. **Copy of Permit at Facility**. The GP should not require off-shore or unattended LTFs to retain a copy of the GP at the facility (KPC).

Response: Many off-shore LTFs consist of a temporary "corral" of boomsticks designed to anchor and contain log rafts, and do not include a permanent structure at the discharge site. The cover page of the GP has been modified to clarify that off-shore or unattended LTFs are not required to retain a copy of the permit at the discharge site. As an alternative, a copy of the permit must be kept at the nearest administrative or field office managing LTF operations.

C. Comments on Part I (Authorized Facilities)

C1. **Geographic Area**. Port Graham, English Bay, and Seldovia should be included in the GP. EPA should clarify the geographic boundaries of the GP (Chugachmiut).

Native allotment projects in Cook Inlet with Type IV and V use descriptions should be

permitted under the GP and not be required to obtain individual permits (Chugachmiut).

Response: The Coastal Zone Management Act, 16 U.S.C. 1451 et seq. and implementing regulations (15 CFR Part 930) prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or designated agency concurs with the certification. In this case, the Kenai Peninsula Borough Coastal District specifically requested that EPA exclude the Port Graham/English Bay Area Which Merits Special Attention, where in-water log storage and transport may conflict with prescribed uses. This exclusion is incorporated as a provision of the final Consistency Determination. As a result, Part III.A.6 of the final GP excludes this area from coverage. The excluded area is shown in Figure 6.

Cook Inlet was excluded from the draft GP because it was not thought that it was an area where marine transport of logs is normally used. During informal consultation with the USFWS on the draft GP, that agency identified the Steller's eider as being listed and portions of its population winters in Cook Inlet. They did not believe there was sufficient information about potential impacts from LTF discharges on the Steller's eider to concur that there would be no effect or that the effect was not likely to adversely affect the species or its critical habitat. Because we are unaware of any permitted LTFs in Cook Inlet at this time and due to the concerns raised by USFWS, the GP still excludes Cook Inlet from its coverage.

C2. **Log Storage Areas**. How does the GP treat in-water log storage areas (Claire Johnson)? The GP should cover log rafting/storage areas, even when not adjacent to an LTF (USFWS, NAS). Log storage and rafting should be regulated in the GP; they may have significant environmental impacts (ACWA).

Existing log storage areas may not meet GP conditions (grounding at low tide, near sensitive areas). How will EPA address these facilities (USFWS)?

Response: EPA regulations clearly define log storage facilities as silvicultural point sources subject to the NPDES program (40 CFR §122.27). The draft GP has been modified to clarify that qualifying log storage facilities may be authorized to discharge under this permit. The definition of "off-shore LTFs" has been revised in Part I.D and Part XII to clarify that independent log storage facilities are also considered "off-shore LTFs."

Log storage facilities authorized under this GP will be subject to the same requirements as off-shore LTFs. For instance, log storage facilities which do not meet the requirements of Part III (e.g., which occur in waters less that 40 feet deep at MLLW, or near sensitive or productive areas) will not receive authorization to discharge under this GP.

C3. **Use Descriptions**. Use descriptions should be more flexible to accommodate volumes needed to load a ship. This volume is typically 4 to 7 mmbf (Chugachmiut).

Proposed use descriptions do not accommodate all scenarios. For instance, several landowners may operate an LTF at different use descriptions. GP should recognize that some LTFs will not fit into the use descriptions, and allow case by case review for those LTFs (Chugachmiut).

The use descriptions should be modified to eliminate gaps in volume. For example:

Type I-II: Over 40 mmbf
Type III: 21-40 mmbf
Type IV: 11-20 mmbf
Type V: Up to 10 mmbf (Chugachmiut)

The use descriptions do not accommodate scenarios where an LTF is subject to infrequent or periodic use. Should add "May have infrequent use of low volume levels during a rotation" to the Type IV and V use descriptions (Chugachmiut).

Category V should include scenario where total volume does not exceed 15 mmbf but is transferred in one or two years (i.e, annual volumes will exceed 5 mmbf limit - Chugachmiut).

What use description would be appropriate for an LTF which transfers 1 mmbf/year for seven years (Chugachmiut)?

Response: In May, 1996, EPA requested that Sealaska Corporation collaborate with other timber industry representatives and the U.S. Forest Service to update the "use descriptions" provided in the 1985 ATTF guidelines. EPA selected Sealaska Corporation to lead this effort because of their continued leadership in LTF issues. As a result, Sealaska Corporation evaluated the sizes of operations in Southeast Alaska and developed logical categories for annual and periodic volumes of timber transferred. The divisions were developed with the intention to leave no gaps (Harris 1996).

The use descriptions have two purposes for implementation of the GP. The first purpose is informational. The type of LTF will be described in the NOIs and will provide EPA and ADEC useful information in evaluating NOIs, assessing requests for waivers under Part III.D., and evaluating the effectiveness of the permit conditions. The second purpose and primary purpose was to evaluate appropriate monitoring requirements for the GP. Given the comments received, it has been decided that if an LTF transfers a total of 15 mmbf or more over a five-year period, the LTF must do annual bark monitoring surveys when it is operational. Those LTFs that transfer less than 15 mmbf during the 5-year permit term, do not need to do annual bark monitoring surveys.

While these use descriptions may reflect LTF operations in Southeast Alaska, EPA acknowledges that exceptions may occur, especially for LTFs outside of Southeast Alaska (e.g., southcentral Alaska). Part I.D of the GP has been modified in two ways to accommodate those exceptions:

a) The annual volume limit of 5 mmbf has been deleted from the definition of Type V LTFs, in order to include a wider spectrum of activities. The limit on total volume is less than 15 mmbf transferred during the 5-year term of the GP. This category is intended to include most small operations such as salvage or blowdown sales, and the clearing of homesteads, native allotments, and right-of-ways. Persistent bark accumulations are not expected to occur at Type V LTFs. Therefore, no bark monitoring is required. The decision to waive bark monitoring for this group is based on the relationship between bark accumulations and total volume of timber transferred at an LTF (see Comment H2). However, there is no data regarding how bark accumulations relate to annual use patterns (for instance, that bark accumulations are more extensive if the same amount of timber is transferred over a shorter period of time). Therefore, the definition of Type V LTFs has been revised to limit total volume only.

b) An additional category has been added for "Other Use Description." For LTFs which transfer 15 mmbf or more (Types I-IV), the identification of different use descriptions is required for informational purposes only. Scientific research suggests that the volume of timber transferred affects the amount of bark which accumulates in the marine environment. Information regarding patterns of activity will allow EPA to better evaluate environmental risks associated with LTFs. For this reason, it is more important to gain accurate information on LTFs than to force-fit all LTFs into one of five categories.

C4. **Rotation Period**. EPA should justify the use of an 80-100 year rotation period; actual rotation periods may vary and depend on revision of the Tongass Land Use Management Plan. EPA should define the word "entry" (USFWS).

Response: The U.S. Forest Service (1997a) defines rotation as the "planned number of years between the formation or the regeneration of a crop or stand of trees and its final cutting at a specified stage of maturity." Sealaska Corporation defines rotation as "the length of time that it takes a seedling to grow to commercial size. In Southeast Alaska, ... the time frame will be about 80-100 years duration. However, the duration may be longer depending upon the land management objectives for a given area. In some areas, the rotation could be 200 years if the objective is to preserve much of the forest in a condition similar to old growth for habitat purposes" (Harris 1996). The above definitions of "rotation period" have been added to Part XII of the GP.

The term "entry" is synonymous with "cutting cycle," and refers to a planned, recurring lapse of time between successive cuttings in a crop or stand. These periods are normally a stated proportion of the rotation (Ford-Robertson 1971). In the draft GP, the term occurs in the definition of Category V LTFs; each "entry" was limited to a period of activity "within 5 consecutive years." In Part I.D of the final GP, the limit of 5 consecutive years for each entry has been eliminated. The above definition of "entry" has been added to Part XII (Definitions).

D. Comments on Part II (Authorized Discharges)

D1. **Prohibition of Unauthorized Discharges**. Part II of the GP (Authorized Discharges) should be phrased in a positive tense to allow the discharge of pollutants associated with log transfer activities. This part should avoid negative language that prohibits the discharge of pollutants not specifically referenced in Part II (KPC).

Response: Any NPDES permit must clearly define the scope of pollutants which it authorizes in order to ensure compliance with the provisions of the CWA. Part II of the permit defines the scope of pollutants authorized under this permit and clarifies that the discharge of other pollutants (not specifically set out in Part II) is not authorized under this GP. Part II of the draft GP has not been changed.

D2. **Definition of Bark and Wood Debris**. The GP should address incidental wastes discharged during log transfer. Bark and wood debris should be defined to include minute amounts of soil, lichen, or moss attached to the logs (Sealaska, Koncor, Koniag). As written, the draft GP does not authorize any pollutants other than bark and wood debris (KPC).

Residues allowed under the ZOD should only include bark and wood debris. No other materials should be allowed (USFWS).

Response: The impacts of bark and wood debris which accumulate at LTFs are well-documented. However, in an extensive search of LTF literature, EPA was unable to find any studies documenting the effects of de minimus discharges of soil and organic material and the extent of their accumulation at LTFs (U.S. EPA 1991). Moreover, these effects would be hard to document, due to the difficulties in distinguishing this material from the larger accumulation of bark and wood debris. At this time, EPA lacks the scientific basis to justify a requirement to remove minute amounts of soil, moss, and lichen from the logs prior to in-water transfer. Therefore, the definition of bark and wood debris in Part XII has been revised to include minute amounts of soil, lichen, or moss attached to the logs at the time of log transfer.

D3. **Incidental Waste Streams**. The GP should authorize incidental waste streams such as wood extractives, sediments, and petroleum products (KPC).

Response: Incidental wastes discharged at an LTF may include sediments and petroleum products attached to machinery used in log transfer, rafting and storage. EPA believes that the discharge of wood extractives, sediments, and petroleum products can be largely eliminated through implementation of an effective Pollution Prevention Plan. Stormwater discharges associated with the LTF are addressed under an existing general NPDES permit for stormwater discharges associated with the operation of industrial facilities. Therefore, the GP will not be modified to authorize the discharge of these wastes, except as described under Comment D4.

D4. **Discharges of Oil**. Discharges of oil from some vessels may be allowed under MARPOL. Part I.D should acknowledge that some vessels are already regulated under other provisions of the CWA (KPC).

GP should allow de minimus discharges of oil (e.g., small drips). The GP should not prohibit discharges of oil which are consistent with 40 CFR §110.5 (KPC).

Response: The discharge of oil associated with on-shore or off-shore LTFs would not be governed by Section 311 of the CWA or its implementing regulations (40 CFR Part 110). Section 311 specifically excludes "continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under Section 402 of this Act, which are caused by events occurring within the scope or relevant operating or treatment system."

D5. **Duplicative Permits**. The GP should not regulate flows covered in other permits (e.g., stormwater, other individual permits). The GP should specify that discharges allowed under other permits need not be reported (KPC).

Response: EPA recognizes that some of the requirements of Parts V (Application to be Permitted Under this General Permit) and Part VII (Pollution Prevention Plan) may be redundant with other permit requirements. As much as possible, EPA minimized the regulatory burden on the permittee by incorporating the same requirements as those of other permits.

Part V: In addition to applying for authorization under this GP, many LTF dischargers will also need to apply to the U.S. Army Corps of Engineers (the Corps) for a Section 404 permit for the discharge of dredged and fill materials into U.S. waters. In order to minimize the burden on the permit applicant, EPA duplicated the Section 404 permit application requirements for plan drawings.

Part VII: Some of the Pollution Prevention Plan requirements overlap with those of other permits. The GP allows permittees to incorporate those other requirements by reference. For instance, the evaluation of potential stormwater discharges may be incorporated by reference to an existing Pollution Prevention Plan. Evaluation of potential discharges associated with sludge and sanitary waste may be incorporated by reference to an existing ADEC Wastewater Disposal Permit, and evaluation of potential discharges associated with fuel storage and management may be incorporated by reference to an existing Spill Prevention and Containment Contingency plan. Since the Pollution Prevention Plan requires no reporting, the GP does not present any additional reporting burdens on facilities with existing plans.

E. Comments on Part III (Areas Excluded from authorization under this General NPDES Permit)

E1. **State Parks**. The GP should exclude state parks (ACWA).

Response: Part III.A has been modified to list state parks as an excluded area, unless the applicant provides written permission from the state park superintendent. Even if an applicant obtains this permission, all the other exclusions under Part III would still apply.

E2. **Private In-holdings**. It is not clear why private in-holdings within protected water resource and special habitats are not subject to the requirements under Part III.A (Land use designations) (USFS).

Response: The exclusions in Part III.A were developed in order to avoid permitting any discharge which conflicts with the authorities of the landowners or administrators of protected water resources and special habitats (see page 7 of the Fact Sheet). With the exception of Part III.A.6 (Port Graham/English Bay AMSA) and Part III.A.7 (endangered species), this authority does not extend over private inholdings; therefore, Part III.A does not exclude private inholdings within federal or state lands. The draft GP has been modified to clarify that the exclusions listed under Parts III.A.1-5 do not apply to private inholdings within state or federal lands.

E3. **Steller Sea Lions**. LTFs, storage and rafting areas should be two miles from any Steller sea lion haulout or rookery site (ACWA).

Response: The exclusion listed under Part III.A.7 is based upon the requirements of Section 7 of the Endangered Species Act (16 U.S.C. 1530 et seq.). Section 7 requires every federal agency, in consultation with National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS), to ensure that an action it authorizes is not likely to jeopardize the continued existence of any species listed under the Endangered Species Act, or result in the destruction or adverse modification of critical habitat required by any listed species. After informal consultation with the USFWS and NMFS, EPA identified the Steller sea lion as a species, which may be impacted by the proposed GP. In developing the GP, EPA accepted all conditions proposed by NMFS during informal consultations (Pennoyer 1996). As a result, the GP does not authorize any LTF discharge within one mile of any major Steller sea lion haulout or rookery site listed in Table 5, or within any Steller sea lion "Critical Habitat Area" defined in 58 FR 45269, unless written permission is obtained from NMFS (see pages 7-9 of the Fact Sheet). These restrictions are substantially more protective than the critical habitat requirements for the Steller sea lion, and are based on the provisions of the Endangered Species Act and the best professional judgment of the NMFS.

E4. **Objective/Numeric Siting Criteria**. The GP should include substantive stipulations regarding siting, LTF type, and monitoring requirements (NAS). If the GP uses ATTF Guidelines as enforceable provisions, EPA should define qualitative terms such as "extensive tideflats," "least productive," and "strong enough currents" (USFS).

Part III.B.2 (Bark Dispersal) should specify surface current velocity at mid-tide. EPA should identify an acceptable range of velocity (USFWS).

In Part IV.B.4 (Sensitive Habitats), EPA should specify a distance (such as ½ mile) to replace the subjective term "near enough to affect" (USFWS).

Site productivity is subjective, and may require extensive biological investigation. This is onerous to the applicant. The reference to site productivity in Part III should be deleted or revised to exclude only areas of highest productivity (KPC).

Response: The application of the siting criteria in the GP determines whether a LTF discharge can be authorized under the GP or must be covered by an individual permit. The ATTF Guidelines have been accepted as the basis of LTF permitting in Alaska for over a decade. The recommendations of the ATTF were based upon scientific research and personal knowledge of numerous professionals with "hands-on experience" with LTFs. The ATTF Guidelines acknowledge the effort invested by diverse interest groups: "These guidelines are evidence that industry, public and private agencies involved in the review and permitting of LTFs can work together to develop resolutions to difficult problems." For these reasons, the provisions of this GP rely heavily upon the ATTF Guidelines (see page 4 of Fact Sheet). Unless there is sufficient basis to justify a change, the GP incorporates the exact language of the ATTF Guidelines.

The ATTF Guidelines stress the need for using best professional judgment in making permit decisions: "These guidelines can be used in the existing permitting process which emphasizes best professional judgment of the agencies in close cooperation with the applicants when selecting sites and imposing permit stipulations. The process is preferred because it accommodates site-specific conditions and enables all participants to collectively evaluate the practicable alternatives and determine the best way to minimize impacts." A subsequent study attempted to quantify the ATTF Guidelines, but failed to identify any reliable, objective predictors of bark accumulation (Freese et al. 1988).

Since there are no documented objective, numeric criteria for evaluating LTF sites, EPA must rely on best professional judgment when evaluating whether a permit application meets the subjective, descriptive criteria provided in the ATTF Guidelines. The determination that the exclusions listed under Part III.B do not apply to a proposed discharge will be based upon site-specific information provided in the Notice of Intent (NOI), and other available sources, following consultation with state, federal, and tribal representatives (see Page 9 of the Fact Sheet).

E5. **Flexibility in Applying Siting Criteria**. The GP should provide flexibility to consider a "best mix" of the siting criteria. The rigid application of ATTF Guidelines would force every applicant to seek a waiver (USFS).

ATTF Guidelines should not be used as strict conditions for excluding certain areas from coverage. The criteria are subjective and descriptive. The descriptive terms used in the guidelines don't provide objective criteria for strict conditions (USFS).

In Part IV.B, Areas not meeting ATTF Guidelines, EPA should change the word "should" to "shall" (USFWS).

Response: The conditions listed in Part III.B are taken verbatim from the ATTF Siting Guidelines, with the exception of Part III.B.5 where the word "shall" has been inserted. The use of the word "should" rather than "shall" reflects the intent to provide flexibility in considering the ATTF Siting Guidelines. A waiver or individual permit will be required for any proposed LTF discharge which does not meet the provisions of Part III.B. The waiver allows EPA to evaluate site-specific conditions and consider the "best mix" of siting guidelines in areas where all the guidelines cannot be met. The use of the guidelines as strict requirements or standards would be inconsistent with the stated objectives of the ATTF Guidelines, to promote consideration of all guidelines in the permitting process rather than prescribe a rigid set of requirements.

E6. **Other ATTF Guidelines**. The GP should include all ATTF Siting Guidelines (Sealaska, Koncor, Koniag, Cape Fox). The ATTF Guidelines are comprehensive and reflect a careful balancing of all criteria. The guidelines are meaningless when some criteria are selected without consideration of the others (Sealaska, Koncor, Koniag).

Draft GP only includes select ATTF Guidelines (SEACC, TCS, ASAF, ACWA). EPA should incorporate ATTF guideline C10: "Where feasible, preference must be given to on-shore storage and barging of logs." Owners/operators should be required to show that barging or debarking logs is not feasible. Otherwise, in-water transfer/storage should be prohibited (ACWA).

Response: Section 402 of the CWA authorizes EPA to issue NPDES permits to prescribe conditions necessary to ensure that a discharge complies with the requirements of the CWA. Section 301 of the CWA prohibits the discharge of pollutants to U.S. waters unless that discharge complies with technology-based or water quality-based effluent limitations, whichever is more stringent. The ATTF guideline dealing with on-shore log storage (C10) applies directly to technologies which limit discharges into U.S. waters. Therefore, EPA has added a provision to the Notice of Intent section that requires each discharger to provide EPA an assessment of the feasibility of onshore storage and barging. (see Comment A3).

Many of the ATTF Guidelines are beyond the scope and authority of the CWA. Factors such as upland and marine facility requirements (S2, S3, S4, S10) and avoidance of eagle nest trees (S10), are not directly related to the discharge of pollutants into waters of the U.S., and have not been included as enforceable provisions of an NPDES permit.

E7. **Siting Criteria for Log Rafting and Storage**. Requirement to raft and store logs in waters 40 feet deep at MLLW is listed twice in permit (in Part III, Excluded areas, and Part IV, Categories of Permittees and Requirements). This is confusing and redundant (COE).

Response: The draft permit addresses log rafting and storage under Part III (excluded areas) and Part IV.B (Best Management Practices). Both of these provisions derive from the ATTF Guideline S9 for log storage and rafting. In the final permit, Part III.B.5 was modified to reflect siting characteristics, rather than operational practices. This provision enables EPA to deny authorization for applicants where siting of the proposed LTF would not allow log storage and rafting in waters at least 40 feet deep at MLLW. However, site characteristics alone do not assure that log storage and rafting will occur in designated areas. Therefore, the final permit retains the best management practice regarding log storage and rafting practices (Part IV.B.1.d) as an enforceable provision of the permit.

E8. **Compliance of Existing LTFs with ATTF Guidelines**. There are several examples where NPDES permits were issued where siting conditions did not meet ATTF Guidelines: Behm Canal 67, Peril Strait 14, Peril Strait 29. The GP will not be any more protective of marine or intertidal habitats, unless it includes more substantive stipulations and includes language to exclude pressure of politics and economics (NAS).

Many existing LTFs don't meet the ATTF Guidelines. Either the ATTF Guidelines are inadequate, or EPA is ignoring expert advice solicited from other agencies (USFWS, NMFS, ACWA).

Response: This GP is part of a continuing effort to establish controls for LTF discharges in accordance with the provisions of the CWA (Cantor 1997b). A major event in LTF regulation occurred with the development of the ATTF Guidelines on October 21, 1985, and their subsequent incorporation into the NPDES permit program. Evidence suggests that, in fact, individual NPDES permits did result in substantial protection of marine habitats. Data collected from LTFs with individual NPDES permits suggests that bark deposits at the post-1985 permitted LTFs were substantially smaller than those measured prior to 1976 (see page 3 of Fact Sheet and comment A11).

The examples cited (Behm Canal 67, Peril Strait 14, and Peril Strait 29) do not support a finding that individual NPDES permits were ineffective in achieving compliance with the ATTF Guidelines. No NPDES permit was ever issued for Behm Canal 67 or Peril Strait 14. In the case of Peril Strait 29, use of the site was already authorized through a permit issued under Section 404 prior to October 22, 1985. However, EPA did issue a new NPDES permit for this site, at the request of the permittee. The NPDES permit included several new provisions to further control the discharge and accumulation of bark at this existing, previously permitted site.

EPA acknowledges that many existing LTFs do not meet the ATTF Guidelines. However, the majority of these sites were constructed prior to October 22, 1985, and the development of the ATTF Guidelines. General NPDES Permit AK G70-0000, which contains Section 402 modifications to the Section 404 permits received prior to October 22, 1985, will be the first step in bringing older LTFs into compliance with the ATTF Guidelines and the CWA.

This GP is more protective of the marine environment than any previously issued individual NPDES permit or Section 404 permit issued prior to October 22, 1985. For instance, the GP incorporates several ATTF Guidelines as enforceable provisions, greatly expands the list of best management practices, covers minor dischargers which were previously unregulated, requires the development and implementation of a pollution prevention plan, and provides detailed objectives and methods for bark monitoring. In addition, the GP is expected to improve administrative efficiency, potentially freeing up resources for activities related to compliance, outreach, and research.

E9. **Status of ATTF Guidelines**. It is not clear whether the ATTF Guidelines were finalized. If not, the Fact Sheet should clearly state that the ATTF Guidelines were not finalized (Kinnetic Lab).

Response: The ATTF Guidelines were signed and finalized on October 21, 1985. Copies of the document are available upon request from the U.S EPA R-10, 1200 6th Avenue, Seattle, Washington 98101.

E10. **Appropriateness of Waiver**. GP should provide a mechanism to grant waivers from Part III exclusions (KPC).

Waivers should not be granted for discharges into excluded areas (Sitka Tribe).

Response: The GP does provide a mechanism to consider waivers from some of the Part III exclusions, after additional documentation is provided and EPA consults with tribes and other agencies. However, permittees who receive a waiver from any Part III exclusion are subject to all other provisions of the GP.

Part III.A: The exclusions listed in Part III.A were developed to avoid permitting a discharge that conflicts with the authorized uses of protected water resources and special habitats. The exclusions listed under Parts III.A.2, 3, 4, and 7 can be waived after the applicant provides written permission from the appropriate land owner or administrator.

Part III.B: The GP also excludes areas which do not meet the ATTF Siting Guidelines listed under Part III.B. Applicants who wish to discharge into an area excluded under Part III.B must apply for an individual permit or obtain a waiver in accordance with the provisions of Part III.D. This waiver provision allows consideration of site-specific conditions to identify the "best mix" of siting guidelines available to the applicant (See Comment F5).

Part III.C: Part III.C excludes new dischargers from waters that are listed as "impaired" or "water quality limited" and if continuous coverage of bark and wood debris exceeds both 1 acre and a thickness of 10 centimeters at any point. As explained on page 12 of the Fact Sheet, "this exclusion is necessary to ensure compliance with 40 CFR §122.4(I), which prohibits issuance of a permit for a new source or new discharger which would cause or contribute to a violation in

water quality standards." EPA is not authorized to waive this requirement.

E11. **Waiver Requirements**. Request for waiver from Part III.B excluded areas relies on a finding of no less environmentally damaging practicable alternatives. The use of the Section 404(b)(1) guidelines for regulating a Section 402 discharge is confusing and may not be appropriate (COE).

Response: One of the requirements for obtaining a waiver includes a demonstration that the proposed discharge site is the least environmentally damaging alternative among potential LTF sites. This approach is consistent with the intended application of the ATTF Guidelines: "These guidelines can be used in the existing permitting process which emphasizes best professional judgment of the agencies in close cooperation with the applicants when selecting sites and imposing permit stipulations. The process is preferred because it accommodates site-specific conditions and enables all participants to collectively evaluate the practicable alternatives and determine the best way to minimize impacts."

This requirement is also consistent with the state regulations governing issuance of a ZOD, which require ADEC to "consider alternatives that would eliminate, or reduce, any adverse effects of the deposit" in its decision to allow a ZOD (18 AAC 70.033).

EPA believes that the use of this standard is appropriate in applying technology-based and water quality-based standards in accordance with the provisions of the CWA. Given the fact that LTF owners and operators face multiple permit requirements, consistency among programs should make the permit process less confusing, rather than more confusing.

E12. **Waivers for Pre-existing, Permanent Onshore LTFs**. Earlier drafts of the GP included a statement that "pre-existing, permanent onshore siting may be considered justification for a waiver" from the provisions of Part III. It is not clear why this statement was dropped from the public notice draft of the GP (USFS).

Response: The CWA does not provide for waivers from technology-based or water quality-based limitations on the basis of pre-existing conditions. However, the exclusions listed under Part III do not apply to pre-existing LTFs which received a Section 404 permit prior to October 22, 1985 (see Comment E15). Part I of the final GP has been modified to clarify that this GP does not apply to LTFs which received a Section 404 permit prior to October 22, 1985. Those LTFs' permits are modified by General NPDES Permit AK G70-0000.

E13. **Consultation for Waiver Decisions**. Public comment serves to inform agency and to allow people to participate in processes affecting their welfare. The GP contains no provisions to solicit public input or tribal involvement for granting waivers to Part III excluded areas (Sitka Tribe).

Response: As noted by one commenter (Sitka Tribe), tribes may have intimate knowledge of marine resources (biological and cultural); some information may only be available through local native communities. Many tribes have their own natural resource departments and biologists. Therefore, EPA will consult with affected tribes, and state and federal agencies, prior to authorizing any new discharge under this GP. Unless otherwise required by law, the scope of the consultation is limited to whether a proposed discharge site meets the provisions of the GP (see Comment A6).

E14. **Time Limit for Waiver Decisions**. For proposed LTFs which do not meet the requirements of Part III, the applicant must decide whether to apply for an individual permit or to apply for a waiver. EPA should establish a time limit for determining whether a waiver will be granted or an individual permit will be required. EPA should have a 60-day time limit to make a final permitting decision, with a single 15-day extension if additional information is required (USFS).

Response: Applications to be authorized under this GP will be processed in accordance with the requirements of 40 CFR §124.3:

"Each application for an EPA-issued permit submitted by ... an NPDES new discharger should be reviewed for completeness within 30 days of its receipt. Each application for an EPA-issued permit submitted by ... an existing NPDES source ... should be reviewed for completeness within 60 days of receipt. Upon completing the review, the Regional Administrator shall notify the applicant in writing whether the application is complete. If the application is incomplete, the Regional Administrator shall list the information necessary to make the application complete. ... The Regional Administrator shall notify the applicant that the application is complete upon receiving this information."

In contrast, EPA regulations do not impose a time limit regarding the final NPDES permitting decision. EPA's goal in managing this GP is to provide written notification that a proposed discharge is/is not authorized under the GP within the shortest time period possible. EPA anticipates that routine processing of NOIs will not take over 60 days, allowing 30 days for consultation and an additional 30 days for administrative processing. For this reason, the GP requires permittees who are authorized to discharge under an effective individual NPDES permit and who seek authorization to continue discharging under this general NPDES permit to submit an NOI no later than 60 days prior to the expiration date of the individual NPDES permit. Permittees who are authorized to discharge under an administratively extended individual NPDES permit, and who seek authorization to discharge under the general NPDES permit, must submit an NOI at least 60 days prior to anticipated commencement of operation and discharge or, if currently operating, no later than 60 days from the effective date of the general NPDES permit. Owners or operators of an LTF who are currently operating, and/or who may have submitted an application for an individual NPDES permit, and who seek authorization to discharge under this general NPDES permit must submit an NOI at least 60 days from the effective date of this general NPDES permit. However, unforeseen circumstances may prevent

EPA from achieving this goal.

E15. Impaired Waterbodies. The draft GP would exclude discharges where bark accumulations exceed the ZOD no matter what the circumstances. The ZOD should accommodate sites where bark accumulation could be decreased by decreasing activity levels or by natural flushing, or where only a small additional volume of timber would be transferred at the site (USFS).

Response: In accordance with EPA regulation and ADEC's 401 certification, the provisions of Part III.C exclude new discharges into waterbodies designated as impaired for residues, or into any waters where existing continuous coverage of bark and wood debris exceeds both 1 acre and a thickness of 10 centimeters at any point. State and federal regulations prohibit the issuance of a permit for a new discharger which would cause or contribute to a violation in water quality standards (40 CFR §122.4(I) and 18 AAC 70.010). The exclusion for water quality-limited, or impaired, waterbodies is necessary to ensure compliance with these regulations, and cannot be waived.

Since the regulations cited above apply to new dischargers, this exclusion does not apply to dischargers already authorized under a Section 404 permit issued prior to October 22, 1985. Requirements for LTFs which received a Section 404 permit prior to October 22, 1985 are addressed separately in General NPDES Permit AK G70-0000.

E16. LTF Pollutants in Impaired Waterbodies. "Impaired waterways" should only refer to waters where residue or color are exceeded (Sealaska, Koncor, Koniag). The exclusion for impaired waterbodies should only apply to waterbodies listed for parameters related to LTFs, and should not include waterbodies listed for dissolved oxygen, color, toxicity, hydrogen sulfide, dioxin, sludge, sediment or other parameters (KPC).

Response: The draft GP excluded discharges into waterbodies which were "impaired" or "water quality-limited" for pollutants related to log transfer or storage activities, and listed dissolved oxygen or residues as examples. The primary impacts reported at log transfer and storage relate to deposits of bark and wood debris in the marine environment. These deposits can result in long-term changes in the physical, chemical, and biological structure of the benthic environment. However, researchers did not find significant differences in temperature, salinity, dissolved oxygen, biological oxygen demand, total sulfide and total organic carbon in water overlaying bark deposits at a log handling site in British Columbia. Other researchers agree that leachates and BOD are unlikely to reach toxic levels in the water column unless deposits are extensive and/or hydraulic flow is very small (see pages 15-16 of the Fact Sheet). Therefore, Part III.C of the GP has been revised to exclude only those waterbodies listed as impaired or water quality-limited for residues.

E17. List of Impaired Waterbodies. The draft GP text refers to a Table 6 but does not include a Table 6 for impaired waterbodies. However, the GP should not include this table, since the list of impaired waterbodies is dynamic (KPC).

Response: EPA agrees. Since Section 305(b) of the CWA requires the state to update the state water quality report every two years, this list is expected to change at least two times during the life of the GP. Part III.C has been changed to apply only to the effective list of impaired or water-quality limited waterbodies. The reference to Table 6 has been deleted from the final GP.

E18. Discharges into Impaired Waterbodies. The GP should allow LTFs to be constructed and operated in non-impaired portions of impaired waterbodies (KPC).

Response: Under Section 303(d) of the CWA and EPA's implementing regulations, the states must compile a list of impaired and threatened (water quality limited) waters that do not or are not anticipated to meet applicable water quality standards after the application of technology-based or other required controls. These waters need additional controls to meet or maintain those standards. The Section 303(d) listing process includes extensive public participation requirements (U.S. EPA 1995). If the designation of "water quality limited" is inappropriate for any portion of any listed waterbody, this should be addressed in the context of the Section 303(d) listing process and not in the context of this permit.

E. 19 Effects of discharge on Steller's Eiders. USFWS concurs with the finding that discharges in compliance with the draft GP are not likely to adversely effect spectacled and Steller's Eiders, threatened or endangered species found in the area covered by the draft GP however, we request consultation on LTFs authorized on Kodiak or Afognak Islands (i.e. within the winter range of Steller's Eiders). (USFWS).

Response: Paragraph 8 in Section III.A. of the GP has been modified to state that no discharge may be authorized within the waters surrounding Kodiak or Afognak Islands if in consultation with the USFWS it is determined that the discharge would effect the wintering activities of the Steller's Eider. Dischargers to these areas must submit concurrence from the USFWS along with the NOI to be authorized under the GP.

F. Part IV (Categories of Permittees and Requirements)

F1. **Inconsistency in Definition of Zone of Deposit (ZOD)**. The depth criteria of the ZOD is ambiguously defined in the fact sheet and draft GP (Huna Totem, Sealaska, Koncor, Sheeatika, Koniag). EPA refers to the ZOD as both "one acre" and "one acre and 4 inches deep at any point." These inconsistencies should be resolved (Sealaska, Koncor, Sheeatika, Koniag).

Response: The GP has been revised to correct any inconsistencies in the language describing the Zone of Deposit (ZOD). A definition of the ZOD has been added to Part IV.A.3, Part VI.C.2, and Part XII; all references to the ZOD now include the exact language provided in the state's Section 401 certification.

F2. **Basis and Policy for ZOD Authorization**. ADEC has no enforceable policy regarding the ZOD. The ZOD should reflect the marine environment, including the size and productivity of the bay or inlet where it is located (USFS).

ADEC is required to consider alternatives to eliminate adverse effects of a ZOD, impacts on aquatic life, bioaccumulation, persistence, and impacts on other uses of the water body. What is their basis for allowing a ZOD? The scientific literature regarding bark deposits shows adverse effects (ACWA).

Interpretation of ATTF Guidelines. ZOD should be changed to allow "continuous coverage exceeding both one acre and 4 inches deep" for the following reasons: 1) this definition is consistent with intent and language of the ATTF Guideline for bark accumulation; 2) it is reasonable and practicable, and cost effective; and 3) it is sufficient to protect marine life.

Research suggests that many older and several "new" (post-1985) LTFs have bark deposits of 100% coverage exceeding both one acre in size and a thickness greater than 4 inches at any point. However, the ATTF's expectations were that the limit would be approached only in some areas where siting, transfer system selection and solid waste management had failed to prevent or significantly diminish harmful bark accumulation. The intent of the ATTF Guidelines was to identify a threshold from an environmental perspective which was practical and cost effective. The limit of 100% coverage exceeding both one acre in size and a thickness of 4 inches is consistent with the ATTF expectations (Sealaska, Koncor, Sheeatika, Koniag).

The purpose of the ATTF Guideline for bark accumulation was not to require remediation for any accumulation, no matter how slight. The ZOD presented in the draft GP is based on a threshold of continuous coverage exceeding one acre, if any portion of that one+ acre -- no matter how small -- exceeds 4 inches in thickness. A one-acre rule, with no depth requirement, would not differentiate between a pile with a single point over 4 inches deep, and a pile where the whole area was over 4 inches deep. This interpretation of the ATTF guideline for bark accumulation is erroneous, and is not consistent with the purpose of that guideline. The ATTF defines a threshold level when the area of continuous coverage of bark, with a depth over 4 inches, covers over an acre of bottom (Sealaska, Koncor, Sheeatika, Koniag).

The language proposed by ADEC is unreasonable and inconsistent with the ATTF Guidelines (FLM, Huna Totem). As the GP is written, one piece of bark 4 inches deep

may trigger remediation (Huna Totem). The ZOD should follow the plain meaning of the ATTF Guidelines, which would be sufficient to protect bottom life (Cape Fox).

A threshold level of 100% coverage exceeding both one acre in size and a thickness greater than 4 inches at any point may require remediation in areas where the depth of the bark deposit is below a level of known or suspected environmental harm. EPA needs to make a scientifically based determination that significant environmental harm would occur at depths below 4 inches before imposing a ZOD of one-acre of continuous cover and 4 inches deep at any point (Sealaska, Koncor, Sheeatika, Koniag).

In the ATTF Guideline for bark accumulation, the adverb "at any point" modifies the verb "exceeding" (Sealaska, Koncor, Sheeatika, Koniag).

Persistent Accumulations. The ZOD should be defined for persistent bark accumulations only. This should be reflected in the ZOD definition (Sealaska, Koncor, Sheeatika, Koniag).

Depth of Bark Accumulation. EPA fails to provide adequate basis for 4-inch depth standard in the ZOD; research indicates impacts at one-half inch for seafood deposits and one inch for bark debris. EPA has no basis for concluding that bark deposits up to 4 inches deep actually reduce environmental impacts from LTFs (SEACC, TCS, ASAF).

The 10 cm (4 inch) depth criterion is based on a study by Freese and O'Claire (1987), where bark depths of 10.9 cm and 12.8 cm resulted in 50% mortality of two bivalves (Sealaska, Koncor, Sheeatika, Koniag).

ZOD should not allow bark depth to exceed 4 inches in waters less than 60 feet deep at MLLW (USFWS).

The 4 inch depth requirement should be in the GP; it is not clear why it was not included (Kinnetic Lab). The ZOD should incorporate both a horizontal and vertical component (Koncor).

Area of Continuous Cover. The area of bark deposition allowed under the ZOD (one-acre) is arbitrary (USFWS).

The study where bark accumulation from 32 sites averaged 1.96 acres should provide a basis for increasing the ZOD (USFS).

Water Depth of Bark Accumulations. ZOD should address bark debris in waters deeper than 60 feet at MLLW. Many LTFs have bark deposits in waters deeper than 60 feet deep at MLLW (USFWS).

The ZOD should also incorporate a water depth (e.g., 60 feet below MLLW) (Sealaska, Koncor, Sheeatika, Koniag). The ZOD definition should be revised as follows: "Continuous coverage of more than 4 inches of bark covering more than one acre of bottom at a depth of less than 60 feet below MLLW" (Shaan-seet, Cape Fox, Sealaska, Koncor, Sheeatika, Koniag).

Patchy Accumulations. GP should define and limit patchy accumulation. Patchy accumulations should be noted in monitoring report (USFWS).

Accumulations under Log Storage Areas. ZOD should be required for log storage areas (USFWS, NAS).

It doesn't seem possible to have in-water log storage without violating the state WQS for residues (COE).

Response: In its discretion, ADEC will issue or certify a permit that allows deposit of substances on the bottom of marine waters, within limits set by ADEC. The state formally solicited input from the public on the provisions of the draft Section 401 Certification for this GP and the Section 402 modifications of Section 404 permits issued for LTFs prior to October 22, 1985. Public comments received during the public notice period were considered in the development of the final Section 401 Certification (see Comment F4). ADEC has authorized a final 401 certification including a ZOD for LTFs that limits the accumulation of bark and wood debris on the ocean bottom to within the project area. The ZOD may include continuous coverage, discontinuous coverage, and trace coverage by bark and wood debris. ADEC will inform EPA during its review of each NOI whether it will rescind the ZOD for a particular LTF. A recission would require the LTF to seek an individual permit and different ZOD.

F3. **ZOD Waivers**. The ZOD should allow site-specific flexibility (Sealaska, Koncor, Sheeatika, Koniag, USFS). The ZOD should be tailored to accommodate LTFs with only limited future use, LTFs which are not causing material environmental harm, or LTFs where remediation may cause more environmental damage than allowing the bark deposit to remain in place (Sealaska, Koncor, Sheeatika, Koniag). The ZOD should accommodate sites where bark accumulation could be decreased by decreasing activity levels or by natural flushing, or where only a small additional volume of timber would be transferred at the site (USFS).

The GP should allow a waiver from the ZOD, where the applicant must prove that WQS will not be violated and that no less environmentally damaging, practicable alternative exists to the proposed discharge (USFS).

Response: The state authorized ZOD (consisting of the project area) is based upon the State Water Quality Standards (18 AAC 70.210). However, any permittee may apply to the state for a larger ZOD if they believe that the authorized ZOD is inappropriate. In evaluating an

application for a ZOD, ADEC will consider factors listed in 18 AAC 70.033. The burden of proof for providing the required information is on the person seeking to establish a ZOD.

F4. **Section 401 Certification Process**. Suspend processing of the GP until the Section 401 Certification is drafted. ADEC should provide an opportunity for interested parties to comment on draft 401 certification and proposed ZOD.

The GP process should be suspended until the Section 401 Certification (with a definition of the ZOD), and the ACMP consistency determination, are available for public review (Cape Fox, Sealaska, Koncor, Koniag). Until these draft documents are provided, Sealaska cannot comment on any conditions these agencies may attach to the GP (Sealaska, Koncor, Koniag). Processing of the GP should be suspended until the ZOD issues are resolved (FLM).

ADEC has not provided the language for the ZOD (USFS). ZOD needs to be clarified, and should be public noticed. Most LTFs will not be able to meet a ZOD which is smaller than one acre of continuous cover and 4 inches deep, and will have to obtain individual permits (KPC).

Response: EPA may not issue a permit until a certification is granted or waived in accordance with Section 401 of the CWA. In the public notice for the draft permit and proposed modifications, EPA advised persons wishing to comment on the Section 401 Certification to submit their comments to ADEC within the comment period extending from September 30 through November 20, 1996. The draft GP and Section 402 modifications of Section 404 permits incorporated a ZOD based on the ATTF Guidelines. After the comment period closed, EPA forwarded a copy of all comments received to ADEC, along with a summary of any comments relating to the ZOD.

In addition, ADEC held extensive stakeholder input into the ZOD and other certification issues. ADEC held two additional formal comment periods its certification: July 1 through August 8, 1997 and January 8 through February 8, 1999. The final Section 401 Certification was only issued after consideration of all comments received during the public notice period.

F5. **Effluent Limitation for Residues**. Bark deposit limits are only listed in Part VII; they should also be listed in Part IV.A (Kinnetic Lab).

Response: Part IV.A.3 prohibits the discharge of bark or wood debris and other residues which violate state water quality standards, except as authorized by a ZOD issued by ADEC. In order to clarify the permit requirements, Part IV.A.3 has been modified to include the ZOD defined in the state Section 401 Certification.

F6. **Remediation of LTFs**. EPA should hold permittees accountable for reclaiming LTFs and restoring them to a natural state (AWRTA). The GP needs to address site restoration,

rehabilitation, and compensatory mitigation for habitat loss if bark removal is not implemented (USFWS, AWRTA). Permittees should be required to remediate damage to the environment after operations are completed (Sitka Tribe).

The excedence of the bark accumulation threshold level should trigger the need for a remediation plan, not a violation (Koncor).

EPA should require the permittee to develop a remediation plan where bark accumulations exceed the ZOD. The nature, pace, and extent of remediation should be dependent upon site-specific variables (Sealaska, Koncor, Sheeatika, Koniag).

EPA should hold public hearings on cleanup of cables, heavy equipment, sunken logs (e.g., Poison Cove). This debris may cause anchorage problems; in some cases, divers are needed to disentangle the anchors (Claire Johnson).

U.S. Army Corps of Engineers and the Alaska Department of Natural Resources have not been receptive to concerns about cleaning up "trashed LTFs" (Claire Johnson).

In Thorne Bay, the reported use of chemical poison to kill torritoes destroyed all aquatic life in the bay. This poison contained arsenic and PCP. Arsenic was also found in Ward Cove, possibly from direct application to in-water log rafts to kill torritoes. All older LTFs should be tested for arsenic and PCP contamination. Older LTFs should be closed until a remediation plan is developed to address toxic contamination and clean up (TCS).

EPA or ADEC provide no policy or guidance on remediation of LTFs where bark accumulations exceed the ZOD (USFS).

The draft GP does not include mitigation or additional monitoring for LTFs where the bark deposits exceed the ZOD. This limits EPA's ability to enforce the permit (Kinnetic Lab).

EPA provides no policy or guidance on remediation of LTFs where bark accumulations exceed the ZOD (USFS, Sheeatika, Huna Totem, FLM). This puts LTF operators in a "Catch-22" position (FLM).

Response: Remediation of bark deposits which resulted from discharges occurring prior to authorization under this permit or as a result of a violation of this permit is not a permit development issue. Enforcement of violations of prior permits or unpermitted discharges involves its own procedures and processes different and separate from regulations concerning issuing permits. Enforcement options cannot be required as federally enforceable provisions of a NPDES S permit. After issuance of this GP, dischargers authorized under this GP or under the Section 402 modifications of Section 404 permits will be subject to the provisions contained therein. Under the state's wastewater discharge permit, a threshold level of 1.0 acre and 10

centimeters in depth requires a remediation plan to be submitted and approved by ADEC.

F7. **Remediation Research**. EPA should investigate remediation methods and the benefits of dredging bark deposits (NAS).

Response: EPA supports the concept of a technical working group to investigate remediation, monitoring, and other research needs for future LTF regulation and management. Decisions regarding the group's composition, goals and objectives are outside the scope of this GP.

F8. **Use of Water Quality Standards as Effluent Limitations**. EPA should delete Part IV.A.4 ("discharges shall not cause a violation of the Alaska Water Quality Standards"). Water Quality Standards are not intended to be directly enforceable as effluent limitations in an NPDES permit (KPC).

Response: All NPDES permits must contain any additional effluent limits more stringent than technology-based standards which are necessary to meet water quality standards (Section 301(b)(1)(C) of the CWA). EPA regulations define this to mean that the permit must control all pollutants which EPA determines "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard" (40 CFR §122.44(d)(1)(i)). See also NW Envt'l Adovocates v. City of Portland, 56 F3d. 970 (9th Cir. 1995).

EPA determined that LTF discharges in Alaska have the reasonable potential to cause or contribute to a water quality violation for residues and for petroleum hydrocarbons, oil and grease. The provisions of Part IV.A.2 (residues) and Part IV.A.3 (petroleum hydrocarbons, oil and grease) are taken verbatim from the Alaska Water Quality Standard Regulations (18 AAC 70). Section IV.A.4. is a blanket prohibition against any discharge which causes a violation of the Alaska Water Quality Standards.

In addition, NPDES permits must incorporate any limits contained within a state's Section 401 Certification under 40 CFR §124.53(d)(1) (see 40 CFR §122.44(d)(3)). Therefore, this GP must incorporate the conditions of the Section 401 certification, which explicitly define a ZOD for accumulations of bark and wood debris in the marine environment.

F9. **Logs Deposited on Tidelands**. The GP should clarify requirement to remove logs deposited on tidelands as a method of log transfer (float-off LTFs). Compaction of substrate will result in loss of habitat; grounding of logs should only be allowed as an occasional incident (USFWS).

Response: Part IV.B.2.c of the GP requires that "all logs deposited on the tidelands as a direct result of log transfer or rafting activities shall be removed on a daily basis." This provision is intended to prohibit the repeated grounding of logs at "float-off LTFs" where logs are placed on tidelands or ramps, and the incoming tide floats the bundles off (Faris and Vaughan 1985). The

purpose of this provision is to prevent compaction of the substrate and unnecessary bark loss caused by repeated grounding of logs (see page 20 of the Fact Sheet). Part IV.B.2.c has been clarified to apply to float-off LTFs only. A definition of "float-off LTFs" has been added to Part XII.

F10. **Time Limit for Log Storage**. In order to be enforceable, Part IV.B.1.e should specify maximum allowable time for logs to be left in the water (USFWS).

Response: The ATTF considered a guideline limiting average retention period of each raft at a log storage site. However, this guideline was deleted because of difficulty of determination, and because the industry already moves rafts from storage areas as quickly as possible (ATTF Guidelines, Appendix II: Guidelines that were considered but deleted). For these reasons, Part IV.B.1.e remains unchanged.

F11. **Impacts from Drive-down Ramps**. Drive-down ramps will meet the 3 feet per second entry velocity criterion but can have substantial effects due to the introduction of other pollutants which are uncontrolled and unmonitored: mud and bark from the tires, petroleum products (oil, grease, other lubricants) from overfills, leaking hoses, crankcase and grease fittings, surface runoff (mud, bark) from ruts in the intertidal area (NAS).

Response: The discharge of mud and bark from tires, and petroleum products from leaking hoses and fittings, should be addressed in the Pollution Prevention Plan and can be minimized, if not eliminated, through implementation of site-specific best management practices.

This permit does not authorize stormwater discharges at LTFs. LTF owners and operators with stormwater discharges are required to obtain authorization under a separate General NPDES Permit for stormwater discharges associated with industrial activities.

F12. **Solid Waste**. Part IV.B.1.g should not allow any solid waste to be discharged into marine waters. Any solid waste discovered in marine waters should be removed within 30 days (USFWS).

The GP should not regulate solid waste (KPC).

Response: The NPDES program requires permits for the discharge of "pollutants" from any "point source" into "waters of the United States" (40 CFR §122.1). The term "pollutant" specifically includes solid waste (40 CFR §122.2). The discharge of solid waste, such as cables, bands, and other debris, into marine waters can create both navigational and environmental hazards (see page 15 of Fact Sheet). Therefore, EPA believes that the regulation of solid waste discharges under this GP is appropriate. Part IV.B.1.g, dealing with solid waste, has been retained.

Part IV.B.1.g prohibits the discharge of solid waste into marine waters, to the maximum extent achievable. Possible corrective action for the violation of Part IV.B.1.g will be evaluated on a case-by-case basis. Such action may include the recovery of solid waste discharges and/or change in facility operational practices.

F13. **Solid Waste Disposal**. The last sentence of Part IV.B.2.e (regarding solid waste disposal) should be deleted (KPC).

Response: Part IV.B.2.e prohibits the discharge of bark and wood debris from upland traffic flow areas into marine waters or tidelands. The second sentence of Part IV.B.2.e requires that debris "shall be removed and disposed of on a regular basis at a site approved by ADEC." The upland disposal of bark and wood debris does not involve the discharge of pollutants from any point source into waters of the U.S. (40 CFR §122.1) For this reason, the second sentence of Part IV.B.2.e has been modified to require removal of the bark and wood debris such that the bark and wood debris, or its leachate, shall not enter marine waters.

F14. **Sunken Logs**. The GP should provide flexibility on the removal of sunken logs (KPC).

Response: The GP does not address the removal of sunken logs. However, the definition of bark and wood debris in Part XII has been revised to include sunken logs.

F15. **Off-shore LTFs in Less Than 60 feet MLLW**. Off-shore LTFs in waters under 60 feet deep MLLW should have to go through waiver process (USFWS).

Response: Off-shore LTFs operating in waters at least 40 feet deep at Mean Lower Low Water (MLLW) would comply with the ATTF Siting Guideline for log storage (Part III.B.5) and would not require a waiver from that provision. However, Part IV.B.3.b limits off-shore LTFs to deeper waters (60 feet at MLLW) than is required for near-shore LTFs (see pages 21-22 of the Fact Sheet). In effect, Part IV.B.3.b does require a waiver from this more stringent depth requirement: "Log transfer may occur in waters 40-60 feet deep at MLLW only if the permittee effectively demonstrates that no practicable alternatives are available in deeper waters." Consultation with affected state, federal, and tribal agencies would occur prior to authorization.

F16. **Removal of Intertidal Bark Accumulations**. The BMP requiring daily removal of bark from tidelands is overly stringent (KPC). Daily removal of intertidal bark deposits is not practicable (Kinnetic Lab).

Response: Part III.B.2.d requires that the permittee remove bark and wood debris accumulating at the LTF and adjacent tidelands daily, to the maximum extent achievable. The intent of this provision is to prevent the incidental discharge of these pollutants into marine waters during normal LTF operations. This provision is consistent with the best management practices listed in the Forest Service Handbook (USDA Forest Service 1996), which also requires daily clean-up of bark, debris, or other solid materials when accumulations are present. EPA does not believe

this requirement is overly stringent, or impractical. Intertidal areas are generally exposed twice a day during low tides, and much of the operating season is characterized by long daylight hours. The tools required for clean-up may range from a hand shovel or rake to a power shovel. Moreover, these practices are already employed at many shore-based LTFs in Alaska. However, EPA acknowledges that clean-up may not be achievable on all days, due to weather, tide cycle, or other factors; therefore, daily clean-up is required "to the maximum extent achievable."

F17. **Avoidance of Intertidal Bark Accumulations**. It makes more sense to include a Best Management Practice to minimize accumulations of bark and wood debris in the intertidal area (Kinnetic Lab).

Response: The implementation of any preventive measures which reduce intertidal accumulations of bark and wood debris may also reduce the volume of debris which must be cleaned up under Part IV.B.2.d. These measures should be included in the Pollution Prevention Plan required under Part VII (see comment F16).

G. Comments on Part V (Application to be permitted under this General NPDES Permit)

G1. **Contents of Notice of Intent (NOI)**. GP should establish criteria for plan drawings required in the NOI; sometimes drawings submitted to the Corps are not adequate (USFWS). NOI should include a nautical chart showing the location of the LTF (USFWS, ACWA). Plan drawing in NOI should include location of catalogued fish streams, estuaries, and mudflats (USFWS). NOI should specify angle of ramp for low angle slides (USFWS). The scale of the map (in the NOI) is too large to show the exact location of the discharge (ACWA).

Response: Part V.D of the GP has been expanded. In addition to the requirements listed in the draft GP, the applicant must also provide a nautical chart showing the location of the LTF, the location of catalogued fish streams, estuaries, and mudflats, and the angle of the ramp for low angle slides. This additional information will help EPA assess whether the proposed discharge meets the requirements of the GP.

G2. **Pre-discharge Survey Requirements**. The proposed pre-discharge survey requirements are too vague (KPC, Kinnetic Lab). The requirements should refer to the ATTF Siting Guidelines listed in the Fact Sheet. The proposed pre-discharge survey requirements do not address the ATTF Guideline regarding sensitive habitats (Kinnetic Lab).

Pre-discharge survey should include surface current velocity and water depths at which each of the characteristics were found (USFWS).

Response: The purpose of the pre-discharge survey is to document the biological resources which may be affected by a proposed discharge; the objective is to determine whether a

proposed discharge meets the requirements of Part III.B of the GP. Part V.D.7 (Receiving Water Information) has been revised to clearly state the purpose and objectives of the pre-discharge survey, and to require a summary evaluating whether the proposed discharge complies with the requirements of Part III.B.

Part V.D.7 (Receiving Water Information) has been further revised to require "representative sampling" of numbers and species of marine organisms, current, bathymetry, and substrate type observed at or near the bottom along transects extending 300 feet from the face of the LTF. Sampling data may be submitted in writing and/or in a narrated underwater video. In order to evaluate compliance with Part III.B.2 (bark dispersal), a representative measure of surface current velocity will be required in addition to characterization of the substrate.

G3. **Pre-discharge Requirements for Off-shore LTFs**. Pre-discharge survey should be required for offshore LTFs in waters less than 60 feet deep at MLLW (USFWS).

Response: The pre-discharge survey provides information needed for EPA to determine whether a proposed discharge meets the ATTF Siting Guidelines listed in Part III.B of the GP. All applicants are subject to the provisions of Part III.B.

However, EPA believes that underwater pre-discharge surveys are generally not needed to determine whether an off-shore LTF meets the conditions listed under Part III.B. Information about proximity to rearing and spawning areas, bark dispersal, and log storage and rafting can usually be obtained through examination of existing nautical maps and other available data (e.g., Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes). This information can be supplemented by site visits and/or depth soundings, if necessary. The conditions for sensitive habitats and site productivity emphasize protection of shallow areas within the euphotic zone (see discussion, ATTF Guidelines S7 and S9). Since off-shore LTFs must be in waters at least 40 feet deep at MLLW, and outside the euphotic zone, there is a low potential for impacting productive and/or sensitive, shallow-water habitats.

However, EPA may request that the applicant submit additional site-specific data, including an underwater survey, if available information suggests that a proposed off-shore LTF fails to meet the requirements of Part III.B. Part III.D (Request for Waiver to Discharge in an Excluded Area) has been revised to state that EPA may request additional site-specific data, including an underwater survey, for any applicant requesting a waiver under this part.

G4. **Life of Permit**. GP should define "life of permit" (USFWS).

The duration of NPDES permits shall not exceed 5 years (40 CFR §122.46). The expiration date of the final GP is provided on the cover page. However, expired permits may be administratively extended until the effective date of a new permit, provided that the terms of 40 CFR §122.6(1) and (2) are met.

G5. **Coordination with U.S. Army Corps of Engineers**. EPA should notify the Corps within 15 days of receipt of a complete application, or furnish a copy to the Corps whenever EPA determines that the application is incomplete. If the NPDES application is incomplete and the Section 404 permit application is complete, the Corps will proceed with their public notice (COE).

Response: Section 404 permits are generally required for new LTFs where there will be dredging or filling in waters of the United States. In 1985, EPA and the U.S. Army Corps of Engineers (Corps) developed a Memorandum of Agreement (MOA) regarding coordination of permitting for LTFs. However, the procedures outlined in Part V of the MOA only apply to individual permits, not general permits. The MOA states that "either or both parties to this MOA may initiate and process a general permit," but does not provide procedures for processing Notice of Intent (applications) under such GP. EPA seeks to coordinate permit processing with the Corps consistent with the stated purpose of the 1985 MOA.

G6. **Coordination with NEPA Requirements**. The 60-day application process subverts USFS obligations under NEPA; USFS is compelled to integrate NEPA into planning process at earliest possible time (SEACC, TCS, ASAF).

For new LTFs, USFS would be applying for authorization under the GP during the NEPA process, and may not begin discharging for one or two more years (USFS).

Response: This GP does not control how the U.S. Forest Service fulfills its NEPA requirements. However, the GP provides guidance on NPDES requirements for LTFs, and an approval process for qualifying new discharges. This predictability should enhance the planning process by allowing an applicant to assess EPA's concerns and expectations earlier in the NEPA process.

G7. **Consultation Process**. The draft GP does not contain a requirement to allow agency input before authorizing a proposed discharge. The GP should describe consultation process (USFWS).

The GP should include a deadline for consultation process with other agencies (e.g., 35 days) (KPC).

Any decision to authorize a discharge under the GP should be contingent upon concurrence from the consulted agencies (ACWA).

Response: EPA will consult with state, federal and tribal agencies on NOIs received. The purpose of the consultation is to ensure that each application meets the criteria listed under Part III and any other provision of the GP before the proposed discharge is authorized (see Comment A6).

However, EPA does not have the authority to delegate permitting authority to other agencies or tribes, except as provided under 40 CFR Part 123 (State program requirements). Section 402 of the CWA clearly establishes EPA as the permitting authority for point-source discharges of pollutants into U.S. waters.

H. Part VI (Monitoring, Reporting, and Recording Requirements)

H1. **Purpose of Bark Monitoring**. EPA's final bark monitoring method should reflect data needs as well as environmental and economic limitations (Craig's Dive Center).

Response: Bark monitoring methods reflect the purpose to ascertain compliance with the Alaska Water Quality Standards for settleable residues in marine waters and the ZOD authorized by the state. These monitoring requirements are consistent with Section 308 of the CWA, which authorizes EPA to "require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods ... , (iv) sample such effluents ... , and (v) provide such other information as he may reasonably require," in order to determine whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard (see Comment H5).

H2. **Types of LTFs Subject to Bark Monitoring Requirements**. The GP should require bark monitoring for all LTFs discharging into waters under 60 feet deep MLLW (USFWS).

EPA needs to re-evaluate the relationship between bark accumulation and volume of timber, and its decision to categorize and regulate LTFs by volume. Small LTFs can cause significant bark accumulation and other impacts (NAS).

Response: The purpose of the bark monitoring program is to determine compliance with the state water quality standard for settleable residues and the ZOD authorized by ADEC (Part VII.C.2). Under the provisions of the draft GP, Type V and off-shore LTFs were not required to monitor bark deposits. This waiver from bark monitoring requirements was based on the determination that these LTFs presented little risk of exceeding the ZOD. However, those facilities are subject to the ZOD.

The relationship between volume and bark accumulation has been demonstrated by Freese et al. (1988). EPA also reviewed bark monitoring data submitted by LTF dischargers permitted after 1985. Limited data was available, due to the lack of historical data regarding total volumes transferred at each site, and lack of uniform monitoring methods and reporting. After reviewing all available bark monitoring reports from permitted LTFs in Alaska, EPA identified seven monitoring reports where total volume of timber transferred was under 15 mmbf. An analysis of this data suggests that there is a low likelihood continuous bark accumulation of more than one acre and thicker than 10 centimeters with transfer of low volumes of timber. In fact, the data suggests that the threshold level of 15 mmbf timber is actually very conservative (Cantor 1997b).

Monitoring data submitted by LTFs authorized under this GP can be used to further define the relationship between bark accumulation and timber volume transferred at an LTF. For instance, data from Type IV LTFs (up to 15 mmbf per year) will be useful in determining whether the threshold of 15 mmbf total volume is appropriate.

The exemption from bark monitoring requirements for off-shore LTFs was based on two factors: a) monitoring is not required for depths greater than 60 feet MLLW; and b) many off-shore LTFs will be low volume operations, limited by the volumes needed to load a ship or other vessel. However, there is reasonable potential for off-shore LTFs to exceed the ZOD where volumes of timber transferred are high. Therefore, Part VI.C.1 has been revised to require bark monitoring for off-shore LTFs transferring over 15 mmbf total. However, monitoring is only required for water depths under 60 feet at MLLW, in accordance with the purpose and objectives of Part VI.C.2 and 3.

H3. **Bark Monitoring for Log Rafting and Storage Areas**. GP should address areas used for log rafting and storage. These areas should be monitored (NAS, USFWS).

Response: Log storage and rafting are point sources for the discharge of pollutants and are covered under this GP. Monitoring of bark accumulation under such areas is required if less than 60 feet MMLW and is consistent with the purpose of the bark monitoring program, to assess compliance with the Alaska Water Quality Standards and the authorized ZOD.

H4. **Bark Monitoring in Dredged Areas**. Bark monitoring should not be required in areas where dredging occurs (KPC).

Response: Bark monitoring will be a critical component of any bark removal program, as a measure of its effectiveness. This is true whether or not the dredging is necessary to limit bark accumulations which may exceed the ZOD.

However, bark monitoring may not be appropriate in all instances. Some LTF dischargers may wish to apply for an individual NPDES permit where site-specific conditions preclude the need or feasibility of annual bark monitoring. For instance, one permit applicant demonstrated that receiving waters were characterized by extremely swift currents. ADEC determined that the risk of bark accumulation was so low that a ZOD was unnecessary. Therefore, the final individual NPDES permit (AK-005233-7) did not require underwater bark monitoring.

H5. **Bark Monitoring Methods**. In order to obtain repeatable, comparable data, the GP should include detailed, exact protocol for dive surveys (Craig's Dive Center). The proposed monitoring methods of Part VII.C.5 should be clarified (Kinnetic Lab). The GP should include substantive stipulations regarding monitoring requirements. The GP should include mandatory monitoring techniques, in order to facilitate data analysis (comparison among sites, plotting of bark accumulation, trend analysis, and predictions of future bark accumulation) (NAS).

Response: The GP does contain substantive, enforceable stipulations to ensure that the objectives of the bark monitoring program are met. Part VI.C.5 includes very specific requirements for the methods and schedule of bark monitoring. These methods were designed by National Marine Fisheries Service and U.S. Fish and Wildlife Service to be the most economic, efficient means of accurately measuring underwater accumulations of bark. Review of monitoring reports from individual NPDES permittees shows that this method has, in fact, been successfully applied in recent years. However, other equivalent methods may be accepted by EPA if they meet the objectives stated in Part VI.C.2. This flexibility will allow permittees to consider site-specific factors and appropriate new technologies.

Part VI.C.6 addresses the contents, signature, and submittal of the monitoring report. Optional forms provided in the Appendix should facilitate the analysis of monitoring data, including comparison among sites, plotting of bark accumulation, trend analysis, and predictions of future bark accumulation.

H6. **Timing of Bark Monitoring Surveys**. Bark surveys should be conducted at least once yearly; should describe full extent of bark accumulation; should be incorporated into EPA's permit record (SEACC, TCS, ASAF). GP should require monitoring to occur in spring (for intermittent operations) or at same time each year (for continuous operations) (USFWS).

The proposed GP should recommend but not require that dive surveys be conducted in the spring. Early spring is not an ideal time for monitoring, due to inclement weather. Contrary to page 26 of the Fact Sheet, mid-summer or fall is better in terms of diver safety and logistics. The reason the surveys are required in spring is to assess bark deposits which persist after winter bark dispersal occurs (Kinnetic Lab).

Response: The draft GP required annual bark monitoring surveys at the beginning of each operating season and at the end of the last operating season. Monitoring will not be required during years when the LTF does not operate. Part VI.C.3 of the GP has been modified to incorporate the following requirements from the Section 401 certification. The preferred time period for conducting an annual bark monitoring survey in a given year is March through May, or prior to operation. If the annual bark monitoring survey conducted at the beginning of the season indicates continuous coverage by bark and wood debris of 0.9 acre or greater, the next annual bark monitoring survey shall be conducted after cessation of log transfer, or in the following year prior to any additional log transfer. The bark monitoring survey shall determine the total area, depth, and outer boundary of continuous coverage by bark and wood debris, and the total area, depth, and outer boundary of discontinuous coverage by bark and wood debris on the bottom, in water depths to 60 feet MLLW.

H7. **Bark Monitoring Transects**. The methods do not specify a maximum transect length (300 feet or 60 feet deep at MLLW) (Kinnetic Lab).

EPA should establish intervals between sampling stations, e.g., 15 feet. This will assure that areal measurements will be comparable (Craig's Dive Center). Sampling stations should be at 15 feet intervals along the transect lines (USFWS)

Response: Part VI.C.5.c states that "measurements are not required beyond the area of bark accumulation, or where water depth exceeds 60 feet deep at Mean Lower Low Water, whichever is first (see comment I3). However, there is no basis for limiting the maximum transect length. In fact, exceedences of the ZOD are more likely to be documented where bark is still present with increasing transect length. The maximum transect length of 300 feet only applies to the pre-discharge survey, which requires the applicant to describe flushing and biological characteristics of the marine environment within a 300 foot radius of the proposed discharge site. For the pre-discharge survey, EPA believes a 300 foot radius is sufficiently representative of the area which would be impacted by an LTF discharge.

The draft GP specified that bark deposits should be measured along each transect line at 30-foot intervals or less. Part VI.C.5.d of the final GP requires a 15-foot interval to improve the accuracy and precision of the data collected.

H8. **Sampling Parameters**. Sampling should include measurements of water depth, bark depth, percent cover, and presence of metal and other debris. USFWS recommends the use of a quarter-meter^2 grid to determine percent cover (USFWS).

Response: The draft permit requires that bark depth and percent cover be recorded at each sampling station along established transect lines. An additional requirement to record water depth and the presence of metal and other debris at each sampling station would be consistent with the purpose of the bark monitoring program. Therefore, Part VI.C.5.d now requires the permittee to report water depth and the presence of metal and other debris, in addition to bark depth and percent cover. The percent cover requirement has been modified to suggest use of a quarter-meter^2 grid.

H9. **Alternative Methods**. Preliminary bark dive survey is not necessary; the same information can be obtained during the actual survey. Dive time is expensive and limited at remote sites (Craig's Dive Center).

A transect line is subject to entanglement and drift. Accurate data can be obtained through following a compass heading (Craig's Dive Center).

Response: Part VI.C.5 provides specific bark monitoring methods which are approved by EPA. However, an equivalent method may be acceptable if it also meets the purpose and objectives of the bark monitoring program outlined in Part VI.C.2. and 3. The elimination of the preliminary

dive survey, or use of a compass heading to establish transect lines, may be proposed as an equivalent method which also meets the provisions of Part VI.C.2 and 3.

H10. **Underwater Videos and Photographs**. Dive surveys should include underwater videos (ACWA). Video footage is helpful in documenting overall conditions (Kinnetic Lab).

Videos and/or photographs would be a big improvement (USFWS).

The use of photographs for measuring or verifying percent cover is generally not helpful (Kinnetic Lab). Bark depth measurements generally require manual probing of the sediments (Kinnetic Lab).

Qualitative observations of habitat and community structure are required in the pre-discharge survey but are not required in the annual bark monitoring surveys. These qualitative observations of species abundance and diversity can help assess whether the LTF is adversely affecting community structure (Kinnetic Lab).

Response: The purpose of the pre-discharge survey is to determine whether a proposed site complies with the ATTF Guidelines listed in Part III.B of the GP. The pre-discharge survey identifies the resources which may be affected by the proposed discharge, and is an essential component of EPA's determination whether a proposed discharge can be authorized under this permit. To that end, underwater videos may be extremely useful to document site productivity (Part III.B.3) and sensitive habitats (Part III.B.4) at the proposed site.

On the other hand, the purpose of the annual bark monitoring survey differs from that of the pre-discharge survey. As defined in Part VI.C.2, the purpose of the bark monitoring program is to determine compliance with the state water quality standard for settleable residues and the ZOD authorized by ADEC. Biological assessment of marine resources is not necessary to determine whether a permitted discharge complies with those elements of the permit, and is therefore not required.

Moreover, data collected from underwater videos would not, by itself, achieve the purpose of the bark monitoring program. First of all, measurements of bark depth can only be achieved by manually probing the sediments. Secondly, bark deposits overlain by a layer of sediments would not be detected by video. Finally, data from video footage is not convenient to review, and must be converted to a written or electronic media before it can be analyzed. However, underwater videos do play an important role in the Quality Assurance Project Plan (Part VI.C.7). Videos and still photographs can provide an exceptional tool for verifying the accuracy of data collected during the dive (see Comment H14).

H11. **Area of Bark Accumulation**. The GP should require the permittee to specify the method used to calculate area of bark accumulation (Kinnetic Lab, Craig's Dive Service).

Response: The method used to calculate area of bark accumulation may affect the repeatability and outcome of the bark monitoring report. Part VI.C.6 (Contents of Report) has been modified to require the permittee to specify the method used to calculate area of bark accumulation.

H12. **Trace Amounts of Bark Accumulation**. The draft GP does not define continuous cover; it is not always possible to differentiate between substrate and bark, especially for depths less than one inch and in certain substrates (Kinnetic Lab).

For bark monitoring methods, trace amounts of bark should be defined as less than one inch deep instead of ½ inch deep (KPC).

Response: At some threshold level, bark depths and percent cover become difficult to measure, and the measurements become less reliable. Areas with "trace amounts" will be included within the boundary of the discharge waste pile, but will not be included in the estimate of 100% cover. "Trace amounts" of bark are defined in Part XII to apply to bark depths less than one inch deep. Continuous cover is also defined in Part XII of the permit as areas of bark and wood debris that are estimated to cover 100 percent of the ocean bottom, as measured within a three-foot-square sample plot and will, at ADEC's discretion, include boulders, rock outcrops, ridges, and other protrusions within an area of continuos coverage that are not covered by bark.

H13. **Boundary of Bark Accumulation**. Objective of providing a precise determination of the outer boundary of the waste pile is not realistic: debris tapers off, and the boundary usually extends beyond depths of 60 feet MLLW (Craig's Dive Center).

The purpose of the bark monitoring program is to ascertain compliance with the Alaska Water Quality Standard for settleable residues and the ZOD authorized by the state consistent with its certification. The Section 401 Certification states that a ZOD is authorized on the ocean bottom within the project area of the LTF and the primary area of continuous coverage must be collocated with the primary area of continuous coverage existing prior to discharge under the GP. The 401 Certification also contains the requirement that the permittee develop practices that will be used to minimize additional bark accumulation if continuous coverage of bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point. The objective outlined in Part VI.C.3, to provide a "precise determination of the outer boundary of the discharge waste pile," has been modified to apply only to waters less than 60 feet at MLLW (see Comment H12). However, to meet the objectives of the bark monitoring survey and monitor compliance with the 401 Certification, monitoring to the outer boundary of the bark residues to 60 feet deep at MLLW, is very important.

H14. **Quality Assurance/Quality Control**. Monitoring program should include Quality Assurance/Quality Control and independent verification of dive surveys (NAS). The actual number of LTFs out of compliance with their permits may be greater than reported, since the monitoring data is self-reported. EPA needs to develop quality assurance/quality control for monitoring data (ACWA).

Response: EPA Order 5360.1 (Alm 1984) addresses policy and program requirements to implement the Quality Assurance Program. The quality assurance program assures the reliability of environmental measurements to ensure that acquired information is suitable for the user's intended purpose. The user must first specify the quality of data he/she needs, and then determine the degree of quality control needed to assure that the resultant data satisfies his specifications. Central to this process is the assurance that the data is of known quality. The quality of data is known when all components associated with its derivation are thoroughly documented, such documentation being verifiable and defensible.

Region 10's Quality Management Program Plan (U.S. EPA 1996) addresses EPA's responsibility to ensure that permits issued by the Office of Water properly reflect Quality Assurance matters. Quality Assurance Project Plans shall be developed and implemented for all environmental monitoring activities, so that all data generated and processed shall be of acceptable and documented quality. In accordance with Region 10 policy, a requirement to develop and implement a Quality Assurance Project Plan has been added to the bark monitoring requirements of Part VI.C.

H15. **Enforcement of Reporting Requirements**. Continued operation of LTF should be contingent upon permittee conducting and submitting a bark survey each year (SEACC, TCS, ASAF). Is there a penalty for permittees who do not submit annual report? If so, it should be described in the GP (USFWS).

Response: The monitoring and reporting requirements are enforceable provisions of this permit. Options for enforcement may include civil or administrative penalties or revocation of the permittee's authorization to discharge (see Part XI.B).

H16. **Submission of Bark Monitoring Report**. The bark monitoring report should be submitted with the annual report (ACWA).

Response: In accordance with the state's 401 certification, Part VI.C.10 (Submittal of Report) has been revised to read that the bark monitoring report shall be submitted within 60 days of completion of the survey.

H17. **Notification of Oil Spills**. Permittees should not have to notify Region 10 for oil spills. Governmental response activities would be initiated through other channels (KPC).

Response: Part IV.A.2 (Effluent Limitations) prohibits the "discharge of hydrocarbons, oil and grease that causes a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines." The requirement to monitor receiving waters for oil sheens (Part VI.B) is necessary to ensure compliance with the provisions of this permit, and is consistent with EPA authorities under Section 308 of the CWA.

I. Part VII (Pollution Prevention Plan)

I1. **Types of LTFs Subject to Pollution Prevention Plan Requirements**. All LTFs should have to develop/implement a Pollution Prevention Plan (ACWA, USFWS). May drop this requirement if "all parties" agree that it is not warranted (USFWS).

Response: The Pollution Prevention Plan addresses all aspects of LTF operations which may result in the discharge of pollutants into receiving waters. The scope of the plan includes log transfer, processing, storage and handling areas; operation and maintenance of tools and equipment; storage and management of petroleum products and other substances; disposal of sludge and sanitary waste; and any other aspect of the LTF which may result in spills or leaks in areas adjacent to or draining into surface waters. For off-shore LTFs, which generally consist only of a temporary "corral" of boomsticks designed to anchor and contain log rafts, the number of potential pollutant pathways is very limited. Therefore, EPA has determined that the Best Management Practices of the GP are sufficient to meet the purpose and objectives of the Pollution Prevention Plan for off-shore LTFs.

On the other hand, the scope of the Pollution Prevention Plan may, in fact, apply to many Type V LTFs. These LTFs are characterized by relatively low intensity and short duration of use; however, the potential pollutant pathways of Type V LTFs are similar to those of other near-shore LTFs. The Pollution Prevention Plan could address and minimize site-specific pollutant pathways which may not be identified or controlled through the other provisions of the permit. Therefore, Part VII.A of the GP has been revised to apply to all shore-based LTFs.

I2. **Bark Removal in Pollution Prevention Plan**. Pollution Prevention Plan should demonstrate why bark removal prior to in-water transfer is not practicable (USFWS).

Response: Part III (excluded areas) of the draft GP has been amended to exclude LTFs where on-shore storage, barging, and/or debarking are feasible (see Comments A3 and E6). Each applicant will be required to demonstrate that non-discharge alternatives, including debarking, are not economically achievable. Where debarking is achievable, authorization to discharge under this permit would not be granted; therefore the provisions of this permit (including the Pollution Prevention Plan requirements) would not apply. For this reason, debarking is not addressed in the context of the Pollution Prevention Plan.

I3. **Deadline for Pollution Prevention Plan**. The Pollution Prevention Plan should be effective immediately upon authorization. Existing LTFs should have 60 days to implement a plan (Sitka Tribe).

Response: The draft GP would require the permittee to develop and implement a Pollution Prevention Plan within six months of the permittee's date of authorization to discharge under this permit. The intent of the six-month period was not to provide a "grace period," but to ensure that the Pollution Prevention Plan reflected "on-the-ground" LTF operations and

practices. Part VII.B of the final GP has been modified to allow only three months for development and implementation of the Pollution Prevention Plan. EPA believes that three months will provide adequate time for the permittee to tailor the Pollution Prevention Plan to reflect site-specific conditions, while minimizing the initial period of non-implementation.

For LTF dischargers which received Section 404 permits prior to October 22, 1985, the permittee will be allowed six months to comply with the best managements practices, including the development and implementation of a Pollution Prevention Plan, required in the Section 402 modifications of their Section 404 permits. This six-month period should be adequate to allow affected parties to evaluate existing operations and make the necessary adjustments necessary to comply with all Section 402 modifications.

I4. **Approval of Pollution Prevention Plan**. The plan should be subject to approval. By the time monitoring/enforcement steps catch up with an inadequate plan, irreparable damage will have occurred (Sitka Tribe).

Response: Evaluation and/or approval of a plan would be most effectively accomplished during a site visit. Due to limited resources, site visits may not occur at every LTF prior to authorization and discharge. However, the Pollution Prevention Plan requirements listed under Part VII are specific and enforceable, and should provide a broad mechanism to address waste management problems documented at a permitted LTF at any time during the permit life.

I5. **Modification of Pollution Prevention Plan**. Pollution Prevention Plan must be modified when a change in the LTF increases the generation of pollutants or risk of release. There should be a time limit for the plan modification (USFWS).

Response: Part VII.H of the GP requires that "a permittee shall amend the Pollution Prevention Plan whenever there is a change in the facility or its operation which increases the generation of pollutants or their release or potential release to the receiving waters." The GP has been modified to require that the plan amendments occur prior to the change.

J. Part XI (Compliance Responsibilities)

J1. **Planned Changes**. The GP should allow permittees to change activities without prior authorization as long as EPA and ADEC are notified. The GP should clearly state that planned changes are allowed, and should explicitly define changes which would be allowed (e.g., change in volume, transfer device, and placement of transfer device) (KPC).

Response: Planned changes are addressed in Part XI.F of the GP as one of the "boilerplate" provisions required for all NPDES permits (40 CFR §122.4(l)). The GP requires that "a permittee shall give notice to the Director and ADEC as soon as possible of any planned changes ... whenever such change could significantly change the nature or increase the quantity

of pollutants discharged." For instance, planned changes may include a change in transfer device or change in timber volume to be transferred at the site.

After receiving information submitted by the permittee, EPA may determine that cause for permit modification or revocation and reissuance exists. Causes for permit modification are listed in 40 CFR §122.62(a), and include "material and substantial alterations or additions to the permitted facility or activity ... which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit." Major increases in use or relocation of the transfer device may trigger the requirement to submit a new application.

J2. **Non-compliance Reporting**. The GP should require reporting of non-compliance as soon as possible (two days), in addition to reporting it in the annual report (USFWS). The notice requirement for anticipated non-compliance should be time limited (e.g., 30 days) (USFWS).

Response: Part X.B of the GP requires that a permittee shall report certain occurrences of noncompliance within 24 hours from the time a permittee becomes aware of the circumstances. These occurrences include discharges into the receiving waters which were not authorized under this GP, and any noncompliance which may endanger health or the environment. Part XI.F requires "advance notice" for any planned changes in the permitted facility or activity which may result in non-compliance with the permit. Both provisions are derived from 40 CFR §122.41(l), which identifies reporting requirements applicable to all NPDES permits. These provisions will not be changed.

K. ADEC 401 Certification Conditions and DGC Consistency Determination Conditions

K1. **Operational Practices**. The Pollution Prevention Plan must identify specific operational practices that will be used to minimize the discharge quantity and area. Practices must include handling of logs out of water, method of transfer, handling of logs in water, and other operational elements.

These conditions have been included in the Pollution Prevention Section of the General Permit.

K2. **Zone of Deposit Authorization**. The Department authorizes a Zone of Deposit for the accumulation of bark and wood debris on the ocean bottom within the project area of a Log Transfer Facility authorized by EPA to operate under the NPDES General Permit. The Zone of Deposit may include continuous coverage, discontinuous coverage, and trace coverage by bark and wood debris.

The Zone of Deposit has been specified in Section IV.A (Effluent Limitations) and Section XII (Definitions) as the project area.

K3. **Zone of Deposit Rescission**. The ADEC, upon review of a Notification, may determine that a Zone of Deposit representing the project area is not appropriate at the proposed location and is not authorized under 18 AAC 70.210. The ADEC will inform EPA of that decision within 30 days of receipt of the Notification, except that the ADEC, may extend such period (by written notice) for an additional time not to exceed 30 days.

The language has been included in Section IIIE of the General Permit.

K4. **Notice of Excedence**. The operator of an LTF shall notify ADEC and EPA if bark and wood debris exceeds the authorized Zone of Deposit.

The requirement to notify EPA and ADEC of any Zone of Deposit exceedences is contained in Section X.C (Other Noncompliance Reporting) of the general permit.

K5. **Contents of the Notification**. The notification of discharge must provide the following information:
a) A map clearly delineating the project area, and a statement of the project area acreage
b) A demonstration that operation of the LTF constitutes important social or economic development in the area, and that a Zone of Deposit is necessary to accommodate operation of the LTF; and
c) A description of known existing uses of the marine water where the LTF is located, and a demonstration that those uses will be fully protected by the proposed operation of the LTF.

The notification requirements have been added to Section V.D of the permit.

K6. **Bark Monitoring Surveys**. A bark monitoring survey must determine the total area of continuous coverage by bark and wood debris, and the total area of discontinuous coverage by bark and wood debris, within the project area in water depths to 60 feet MLLW. If continuous coverage extends more than 15 feet beyond and perpendicular to the lateral transects that bound the two sides of the survey area, then additional transects must be established to determine the extent of continuous coverage beyond the lateral transects. An area of continuous or discontinuous coverage must be calculated as the area in acres enclosed by a line connecting the outermost measured points of continuous or discontinuous coverage, respectively, for that area on the transect array, or by another method approved by ADEC.

The requirements have been incorporated into Section VI.C of the permit.

K7. **Bark Monitoring Surveys**. If a bark monitoring survey indicates that continuous coverage by bark and wood debris is 0.9 acres or greater, and log transfer occurs in that year after that survey, an additional survey must be conducted either 1) in that year, after cessation of log transfer, or 2) in the following year, prior to any additional log transfer.

The preferred time period for conducting an annual bark monitoring survey in a given year is March through May, or prior to operation.

The condition that if the bark monitoring survey indicates continuous coverage of 0.9 acres or greater, an additional survey must be conducted after cessation of log transfer was included in the permit. The preference for monitoring March through May was added.

K8. **Bark Monitoring Surveys**. Bark monitoring surveys must include still photographs that clearly depict the nature and coverage of bark and wood debris on the ocean bottom at representative sample plots along the transects, including at least half the sample plots.

The requirement has been included in the permit.

K9. **Bark Monitoring Surveys**. The operator shall submit the results of a bark monitoring survey to ADEC and the Alaska Department of Natural Resources within 60 days of completion of the survey, unless a longer time is authorized by ADEC. The results of a survey must clearly state the area of continuous and discontinuous coverage by bark and wood debris.

The requirement to submit the survey to ADEC, EPA and Department of Natural Resources within 60 days has been included in Section VI.C.9 of the permit. Enforcement discretion will be practiced if a reasonable longer period of time is needed of the permittee.

K10. **Bark Monitoring Surveys**. If a bark monitoring survey shows that continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the operator shall submit, along with the survey, a statement describing practices that will be used to minimize additional bark accumulation until such time as a Remediation Plan is approved by ADEC, and immediately shall incorporate those practices into the Pollution Prevention Plan for the LTF.

The requirement was added to the permit under Section VI.C.7.

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